NUS CORPORATION
A Halliburton Company

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Ref. 1
1 of 3

215634

FINAL DRAFT
SITE INSPECTION REPORT
FLOWEN OIL DELAWARE VALLEY CORP.
CAMDEN, CAMDEN COUNTY, NEW JERSEY
VOLUME 1 OF 3

FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION
SUPERFUND DIVISION

Flowen Oil Delaware Valley Corp.
Camden
Camden County, New Jersey
Cerclis No. NJD980536577

Documents Reviewed

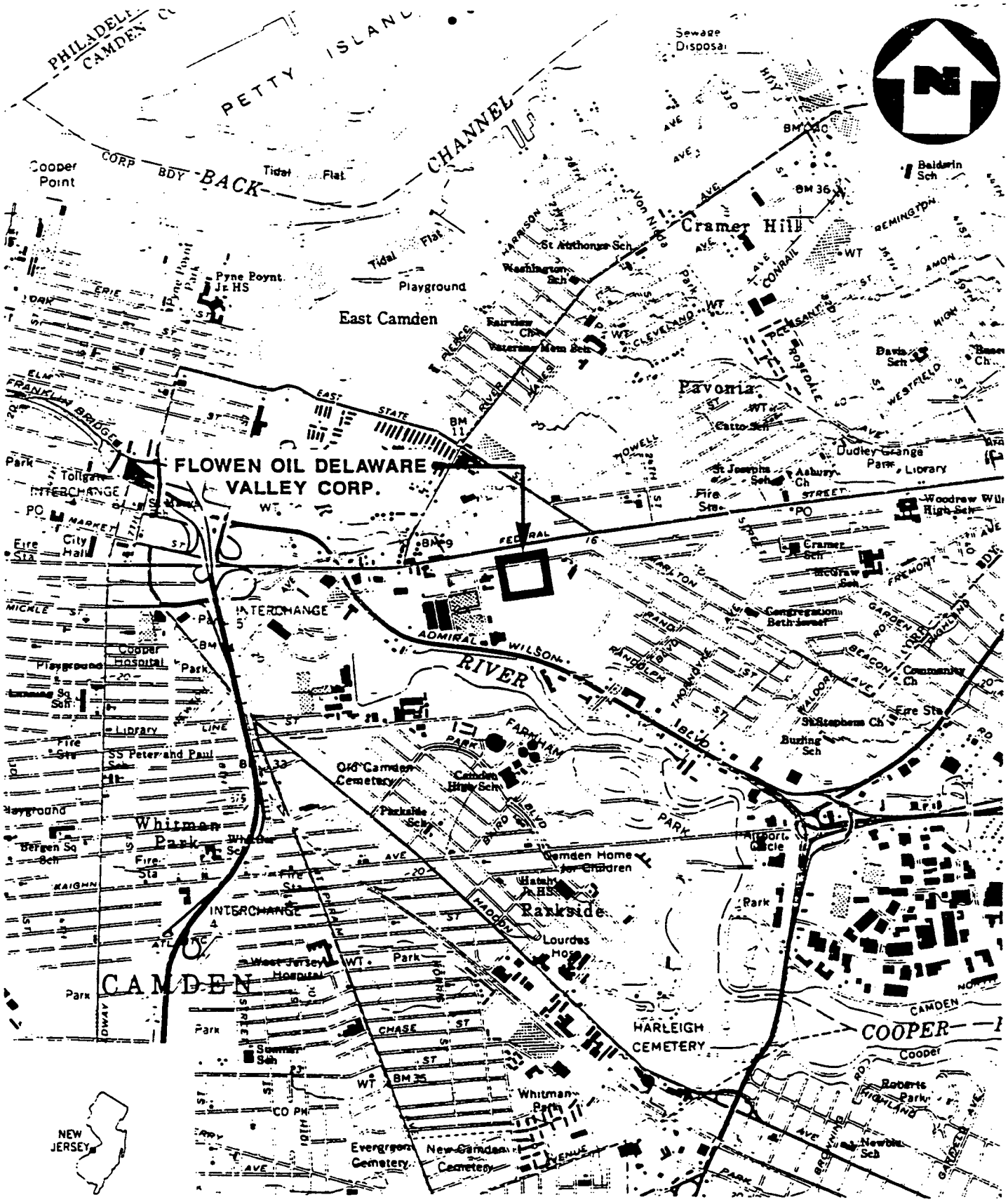
The United States Environmental Protection Agency (USEPA) files and the Flowen Oil Delaware Valley Corp., Camden, New Jersey files were reviewed as part of the Site Inspection Prioritization (SIP) for this site. Documents reviewed included a Preliminary Assessment (PA) performed by the New Jersey Department of Environmental Protection (NJDEP) in 1986 and the Final Draft Site Inspection Report performed by NUS Corporation (NUS) in 1991.

Site Description and History

The Flowen Oil Delaware Valley Corp site (a.k.a. Remtech Environmental (NJ) LP) is a waste oil recycling facility located on 2 acres on Carmen Street in Camden, Camden County, New Jersey. Figures 1 and 2 provide a site location map and a site map, respectively. The site is completely paved and surrounded by a 6-inch curb (Ref 1, p. 2 of 3).

The Flowen Oil Delaware Valley (FODV) Corp facility began operations in 1982 and was permitted to accept various waste oil types, bottom sludge and residue from the following: tank cleanouts of residential/commercial fuel oil tanks, gasoline stations, tank testing, tank truck and mobile vessel cleanouts, oil spill cleanups, and the draining, cleaning or disposal of electric transformers. Other wastes that the facility was permitted to accept were dissolved air flotation (DAF) float, slop oil emulsion solids, heat exchanger bundle cleaning sludge, API separator sludge and waste oil bearing liquids having a flash point between 100°F and 140°F. In November 1989, Remtech Environmental Group (Remtech) acquired the facility (Ref 1, p. 2 of 3).

The facility consists of an office, laboratory, process house, boiler house, incoming waste tank farm, finished product tank farm and wastewater treatment system. Effluent from this system is discharged through the City of Camden sewer system to the Camden County Municipal Utilities Authority (CCMUA) main sewage treatment plant. Numerous spills and violations have occurred at the facility including violations for excessive amounts of oil on the ground and for discharge of oil to the City of Camden sewer system (Ref 1, p. 2 of 3).



(QUAD) CAMDEN N.J.-PA.

SITE LOCATION MAP

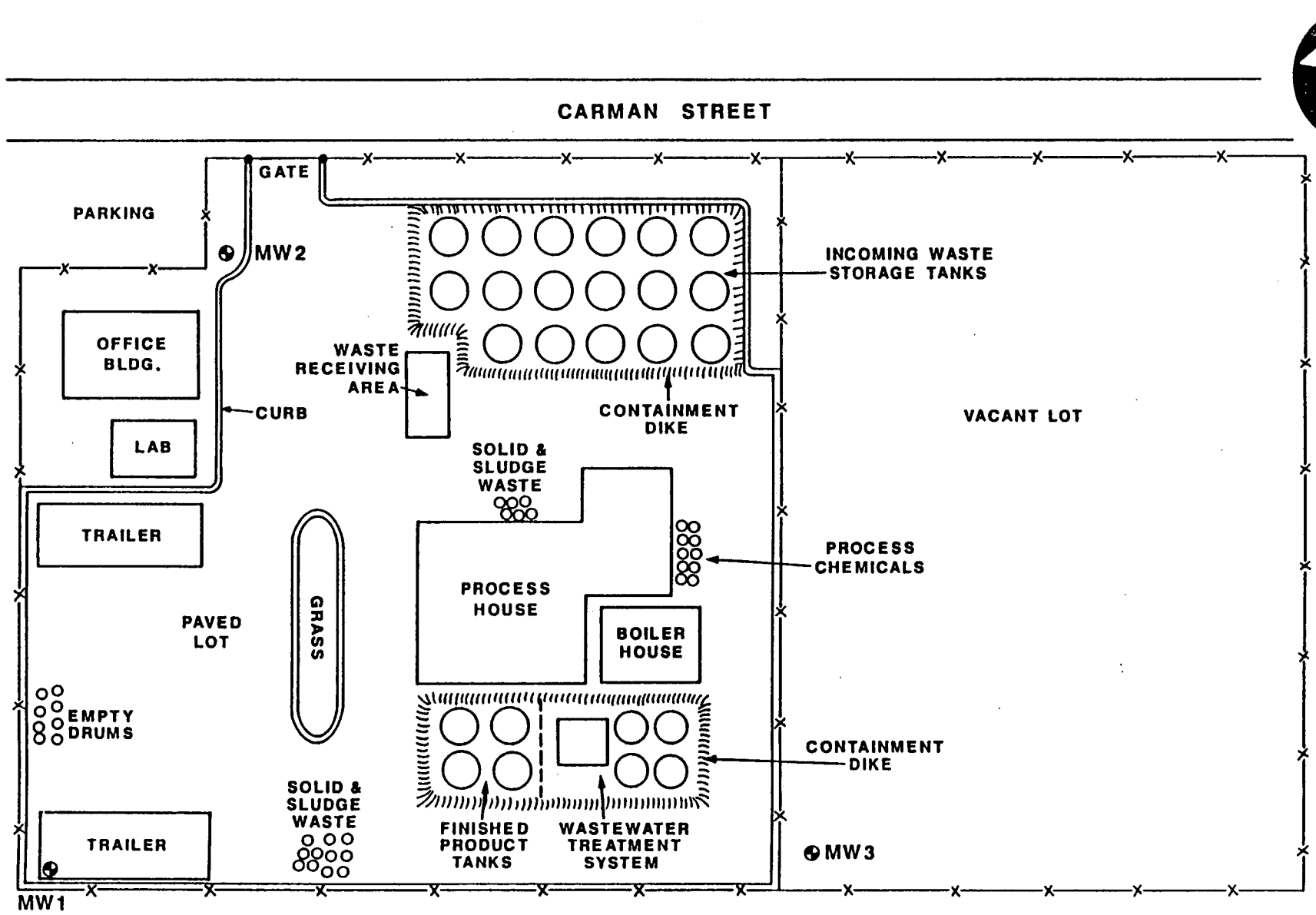
FLOWEN OIL DELAWARE VALLEY CORP.

CAMDEN, N.J.

SCALE: 1" = 2000'

FIGURE 1

NUS CORPORATION



SITE MAP

FLOWEN OIL DELAWARE VALLEY CORP., CAMDEN, N.J.

NOT TO SCALE

FIGURE 2

NUS CORPORATION

Rev. No. 0

Federal/State Records

On June 10, 1981, the NJDEP issued a Certificate of Approved Registration and Engineering Design Approval to Flowen Oil Delaware Valley, Inc. as a waste oil recycling plant pursuant to the Solid Waste Management Act and Hazardous Waste Regulations (Ref. 2, pp. 1 through 9 of 9).

FODV started operations in early 1982 under interim status. In August 1984, FODV submitted a RCRA Part B application to NJDEP. This application was revised and resubmitted by Remtech Environmental (NJ) LP on April 28, 1989. Remtech is currently operating the FODV facility under an interim management contract. Remtech is in the process of finalizing the purchase of FODV and will be both owner and operator (Ref. 3, pp. 1 through 5 of 9).

In 1986, NJDEP conducted a Preliminary Assessment at the site. The site was given a low priority since NJDEP was taking other regulatory action against the company at that time (Ref 4, p. 2 of 69).

In 1991, NUS Corporation conducted a Site Inspection at the site. The NUS report recommended an expanded site inspection due to potential groundwater contaminants resulting from on-site spills (Ref. 1, p. 3 of 3).

In 1994, Ebasco contacted Remtech to determine the RCRA status at the facility. Remtech informed Ebasco that the facility is a NJDEP Part B permitted TSDF, permit #0408B1HP01 (Ref 5, p. 1 of 1).

Conclusions

Based on the existing information, the following conclusions can be drawn regarding the Flowen Oil Delaware Valley Corp site:

- The Flowen Oil Delaware Valley Corp site is classified as a treatment, storage and disposal (TSD) facility as defined in Section 3004 of RCRA, holds an interim permit to operate as a TSD as required by Section 3005 of RCRA, and it is currently subject to Section 3013 of RCRA.

- The site is also permitted under New Jersey Regulations (permit #0408B1HP01).

Recommendations

The Flowen Oil Delaware Valley Corp site is not eligible for CERCLA actions. The site should be deferred to RCRA.

Prepared by:

John Magee/EA

John F. Magee
Task Leader
Ebasco Services Incorporated

Approved by:

for Dev Sachdev, PE, Ph.D.
ARCS II Program Manager
Ebasco Services Incorporated

Reviewed by:

Edgar J. Aguado
Site Manager
Ebasco Services Incorporated

REFERENCES

1. NUS Corporation, Final Draft, Site Inspection Report, Flowen Oil Delaware Valley Corp, Camden, Camden County, New Jersey. August 14, 1991.

2. NJDEP, Division of Environmental Quality, Certificate of Approved Registration and Engineering Design Approval, Flowen Oils Delaware Valley, Inc., June 10, 1981.

3. Letter from Paul L. Fleischmann, Vice President Remtech Environmental Group, to Thomas Sherman, Acting Chief, NJDEP, Bureau of Hazardous Waste Engineering, April 28, 1989.

4. NJDEP, Preliminary Assessment Report, Flowen Oil Delaware Valley Corp., February 14, 1986.

5. Telecon Note: Conversation between Christie Webber of Remtech Environmental and Meg Watson of Ebasco, October 14, 1994.

REFERENCE NO. 1

Ref. 1
2 & 3

SITE SUMMARY AND RECOMMENDATIONS

The Flowen Oil Delaware Valley Corp. Site is located at 1800 Carman Street in Camden, Camden County, New Jersey. Figures 1 and 2 provide a site location map and a site map, respectively. The site exists on a rectangular lot, approximately 2 acres in size. The site terrain is flat and there is a waste oil recycling facility located on it. The site is completely paved, fenced, and surrounded by a 6-inch curb. The site is bordered to the north by Carman Street, to the west by Goodwill Industries, and to the south and east by vacant lots (Ref. Nos. 1, 6, 75).

On June 10, 1981, the New Jersey Department of Environmental Protection (NJDEP) issued a Certificate of Approved Registration and Engineering Design Approval to Flowen Oils Delaware Valley, Inc. for a waste oil recycling plant, which began operations in 1982. This facility was permitted to accept various waste oil types, bottom sludge, and residue generated from the following: tank cleanouts of residential/commercial fuel oil tanks, gasoline stations, tank testing, tank truck and mobile vessel cleanouts, oil spill cleanups, and the draining, cleaning, or disposal of electric transformers. These are identified as NJDEP hazardous waste numbers X721, X722, X723, X724, X725, X726, X727, and X728. Other wastes which the facility was permitted to accept were dissolved air flotation (DAF) float, slop oil emulsion solids, heat exchanger bundle cleaning sludge, and API separator sludge, all byproducts of the petroleum refining industry, and waste oil bearing liquids having a flash point between 100° and 140 ° F. These are identified as EPA hazardous waste numbers K048, K049, K050, K051, and D001. This facility consisted of an office, lab, process house, boiler house, incoming waste tank farm, finished product tank farm, and wastewater treatment system. After the wastewater is passed through the on-site wastewater pretreatment system, then it is carried by the City of Camden sewer system to the Camden County Municipal Utilities Authority (CCMUA) main sewage treatment plant, located in the City of Camden, which eventually discharges to the Delaware River. Numerous spills and violations occurred at the facility while it was under ownership by Flowen Oils Delaware Valley, Inc. Some of the violations were issued for excessive amounts of oil on the ground and others were issued for discharging oil to the City of Camden sewer system. This facility has had numerous air permits, but no evidence of violations were found within background information. In November 1989, Remtech Environmental Group acquired Flowen's waste oil recycling facility (Ref. Nos. 5, 6, 18, 20, 21, 33, 45-47, 49-53, 55-71, 73, 74).

On July 6, 1988, Northeastern Analytical Corp. sampled the three monitoring wells on site. The samples were analyzed for volatile organics, petroleum hydrocarbons, total organic carbon, metals, pH, and total dissolved solids. There were no notable concentrations of contaminants detected within

SITE SUMMARY AND RECOMMENDATIONS (CONT'D)

taken (Ref. No. 6). concentrations above the Maximum Contaminant Levels (MCLs).
am ants cannot be attributed to the site because upgradient wells were unable to be
nere was an insufficient volume of water in well No. 2 and well No. 1 was inaccessible due
era ons. Due to potential groundwater contaminants resulting from on-site spills and the
ulation being served by groundwater within the vicinity of the site, a recommendation of
NDED SITE INSPECTION under CERCLA/SARA is given to the Flowen Oil Delaware Valley Corp.
f. N s. 75-77).

REFERENCE NO. 2

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
SOLID WASTE ADMINISTRATION
32 EAST HANOVER STREET, TRENTON, N.J. 08625

JACK STANTON
DIRECTOR

LINO F. PEREIRA
ADMINISTRATOR
SOLID WASTE MANAGEMENT

CERTIFICATE OF APPROVED REGISTRATION AND ENGINEERING DESIGN APPROVAL

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this registration is hereby issued to:

Flowen Oils Delaware Valley, Inc.
Carman Street
Camden, NJ

for the purpose of operating a Waste Oil Recycling Plant

on Lot No. 1

Block No. 1431

in the municipality of Camden

county Camden

under Facility Registration No. 6408A

This approval is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This approval shall not prejudice any claim the State may have to Riparian land nor does it permit the registrant to fill or alter, or allow to be filled or altered, in any way, lands that are deemed to be Riparian, Wetlands, stream encroachment or flood plains, or within the Coastal Area Facility Review Act (CAFRA) zone or allow the discharge of pollutants to waters of this State without first acquiring the necessary grants; permits or approvals from the Department of Environmental Protection or the U.S. Environmental Protection Agency.

June 10, 1981
DATE

Lino F. Pereira
LINO F. PEREIRA
ADMINISTRATOR
SOLID WASTE ADMINISTRATION

June 10, 1986
EXPIRATION DATE

New Jersey Is An Equal Opportunity Employer

Certificate of Approved Registration and Engineering Design Approval (hereinafter referred to as "permit") for Flowen Oils Delaware Valley, Inc., City of Camden, Camden County.

This Permit along with the Referenced Engineering Plans and Report, herein specified, shall constitute the sole Registration and Engineering Design Approval for the construction and operation of the Flowen Oils Delaware Valley, Inc., City of Camden, Camden County. Any Registration or Approval previously issued by the Solid Waste Administration or its predecessor agencies is hereby superseded.

The Permit is conditioned upon compliance with and implementation of the following:

1. Duty to comply

   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Solid Waste Management Act and is grounds for enforcement action; for permit termination, revocation, and reissuance, or modification; or for denial of a permit renewal application.

2. Duty to reapply

   If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

3. Duty to halt or reduce activity

   It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate

   The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

5. Proper operation and maintenance

   The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process

controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6. Permit Actions

This permit may be modified, revoked, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to provide information

The permittee shall furnish to the Administrator, within a reasonable time, any information which the Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Administrator, upon request, copies of records required to be kept by this permit.

9. Inspection and entry

The permittee, by acceptance of this permit, hereby agrees to allow the Commissioner, his or her employees, agents, representatives, or consultants to enter upon the permittee's premises where a regulated facility or activity is or may be located or conducted, or where records must be kept under the conditions of this permit for the purposes of inspection, sampling, copying, or photographing to insure compliance with any condition of this permit and/or Title 7, Chapter 26 of the New Jersey Administrative Code, and/or N.J.S.A. 13:1E-1 et seq., the New Jersey Solid Waste Management Act.

10. Monitoring and records

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Administrator at any time.

(c) Records of monitoring information shall include:

(i) the date, exact place, and time of sampling or measurements;

(ii) the individual(s) who performed the sampling or measurements;

(iii) the date(s) analyses were performed;

(iv) the individual(s) who performed the analyses;

(v) the analytical techniques or methods used; and

(vi) the results of such analyses.

11. Signatory requirement

All applications, reports, or information submitted to the Administrator shall be signed and certified.

12. Reporting requirements

(a) For a new hazardous waste management facility, the permittee may not commence treatment, storage, or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility, until:

(i) the permittee has submitted to the Administrator by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; (see Paragraph 13); or

(ii) the Administrator has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(iii) within 15 days of the date of submission of the letter in paragraph 12(a)(i) of this section, the permittee has not received notice from the Administrator of his or her intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(b) Planned changes. The permittee shall give notice to the Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.

(c) Anticipated noncompliance. The permittee shall give advance notice to the Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(d) Transfers. This permit is not transferable to any person except after notice to the Administrator. The Administrator may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. In some cases, modification or revocation and reissuance is mandatory.

(e) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(f) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(g) Discharge reporting. The permittee shall report any noncompliance which may endanger health or the environment, including any unauthorized discharge of pollutants into the soil, sewer system, surface water, or ambient air. Any information shall be provided orally as soon as the permittee becomes aware of the circumstances by calling (609)292-5560 during business hours or (609) 292-7172 at all other times or if no contact can be made at the first number. The permittee shall report the type of substance and the amount discharged and any other information the Department may require. A written submission shall also be provided within 14 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact

dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurence of the noncompliance and an implementation schedule for undertaking the suggested measures.

(h) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (b), (e), (f), and (g) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 12(g) of this section.

(i) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Administrator, it shall promptly submit such facts or information.

13. Referenced Engineering Plans and Reports

The construction of the facility shall be in accordance with Title 7, Chapter 26 of the New Jersey Administrative Code and the following submission:

(a) Flowen Oils Delaware Valley, Application for Solid Waste Permit: dated November 12, 1981; signed by Joseph Forte, Jr.

(b) Flowen Oils Delaware Valley, First Supplement to Application for Solid Waste Permit received March 27, 1981 signed by Joseph Forte, Jr.

(c) Engineering designs and narrative prepared and sealed by Thomas A. M. Fisher, N.J.P.E. License No. 7113; various dates.

14. Permitted Waste Types

The permittee will accept for processing only waste lubricating oils which come from equipment such as automobile crankcases, truck and bus crankcases, industrial gear boxes, oil from bearing lubrication, oil from industrial hydraulic systems and oils used in metal cutting machine shops.

15. Waste Analysis and Quality Control

(a) The facility must maintain onsite a readily accessible detailed typewritten description (i.e. laboratory analyses) of all incoming waste types including the limits or concentrations. The facility must receive prior to receipt of each waste shipment and maintain

Ref. 2
7 of 9

for inspection, validation by the generator that the waste is in conformance with this detailed description. The facility is responsible for the validity of the description.

(b) Prior to commencing operation of the facility, a waste analysis plan shall be submitted to the Bureau of Hazardous Waste for approval. This plan shall include:

(i) The parameters for which each hazardous waste stream will be analyzed and the rationale for the selection of these parameters;

(ii) The test methods which will be used to test for these parameters;

(iii) The sampling method which will be used to obtain a representative sample of the waste to be analyzed;

(iv) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date; and

(v) For off-site facilities, the waste analysis that hazardous waste generators have agreed to supply.

The plan should provide that at a minimum this analysis shall contain all the information which must be known to treat, store, or dispose of the waste.

The plan should also provide that the analysis shall be repeated as necessary to insure that it is accurate and up-to-date. At a minimum, the analysis must be repeated when the owner or operator is notified, or knows or should know, that the process or operation generating the hazardous waste has changed.

16. Sewer Monitoring

Prior to operation, the permittee shall construct a system to monitor and analyze any discharge to the sewer system. This system must be constructed and operated in accordance with a plan approved by the Bureau. take sample 1/mo by CCMUA.

17. Fire Fighting and Inspection

An adequate water supply and/or fire fighting equipment must be readily available. Fire fighting procedures must be conspicously displayed.

Fire drills are to be conducted at least twice a year. These drills are to be coordinated with the local fire fighting authority. The facility must notify the Bureau of Hazardous Waste at least forty-eight (48) hours prior to any drills.

18. Inspections and Records

(a) The permittee must perform daily a site inspection of the facility. All tanks, pipes, valves, and other structural components, etc. are to be checked for indications of structural failure, corrosion, leakage, and mechanical failure.

(b) A written daily log of conditions found and the steps taken to correct the conditions are to be kept on-site. Typewritten duplicates of these logs must be maintained on file and must be supplied to Department representatives upon request.

(c) A monthly summary of these daily inspections must be submitted to the Bureau of Hazardous Waste within seven days after the end of each month.

(d) All records prepared in accordance with this approval shall be retained for at least three (3) years.

19. Personnel

The permittee shall submit prior to commencing operation, a comprehensive list of all personnel and their particular function along with their qualifications (include experience, education, and copies of any required licenses to operate facility equipment). An up-to-date list shall be submitted on a semiannual basis.

20. Posting of Notice

The attached notice concerning civil and criminal penalties for illegal disposal of a hazardous waste must be conspicuously posted and available for all employees to read.

21. Plans on-site

One complete set of all engineering plans which have been submitted a narrative description of the operation of the facility, a facility layout drawing, this Certificate of Approved Registration and Engineering Design Approval and such other plans as may be required pursuant to this permit shall be kept on-site and shall be available for inspection by representatives of the Department.

22. Closure Plan

The permittee must submit to the Bureau of Hazardous Waste prior to commencing operations, a facility closure plan for its approval. The closure plan must include:

(a) A detailed description on how the facility will be closed;

(b) A description of possible uses for the land after closure; and

(c) The estimated time required for the completion of closure.

The closure plan to be approved by the Bureau must, at a minimum, provide for:

(a) The removal of all hazardous waste from the facility within 90 days after termination of operations.

(b) The completion of closure in one year or less from the termination of operations unless a longer period is specifically authorized by the Bureau.

(c) Proper disposal or decontamination of all equipment used either in the operation of the facility or the closure process.

(d) Such other terms, conditions, or restrictions the Bureau may require to insure that humans or animal life do not come into contact with hazardous waste or its constituents and that unauthorized discharges of pollutants onto or into the lands, water or air of this state do not occur.

23. Residue Disposal

The permittee shall, prior to commencing operation, submit to the Bureau the names and locations of the facilities intended for disposal of sludges and residues resulting from the facility's operations.

24. Drum Storage

Acceptance and/or storage of drums at this facility is not permitted without prior written authorization by the Bureau of Hazardous Waste.

25. Air Pollution Control

The facility must obtain all necessary permits and comply with all applicable Rules and Regulations of the Bureau of Air Pollution Control, Title 7, Chapter 27 of the New Jersey Administrative Code.

26. Solid and Hazardous Waste Regulations

The permittee shall comply with each of the applicable requirements specified in Title 7, Chapter 26 of the New Jersey Administrative Code, Rules of the Solid Waste Administration.

REFERENCE NO. 3

Ref. 3
1 of 9

REMTECH
ENVIRONMENTAL
GROUP

April 28, 1989

Mr. Thomas Sherman
Acting Chief
Bureau of Hazardous Waste Engineering
State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
401 East State Street
CN 028
Trenton, New Jersey 08625-0028

Re: Reorganization of Part B
Permit Application, Flowen Oil Delaware Valley Inc.
(FODV) Camden, EPA ID # NJD 980536577

Dear Mr. Sherman:

Submitted with this cover letter are ten (10) complete copies of the reorganized Part B Application, including a revised Part A Application, revised to conform with the Part B. Each complete copy consists of two (2) volumes, labeled as "A" and "B".

This revised permit application is submitted per your letter dated January 31, 1989, that approved a ninety (90) day period for REMTECH Environmental (NJ) LP to reorganize the previous submissions.

Thank you for the opportunity to complete this reorganization.

Very truly yours,

Paul L. Fleischmann
Vice President
REMTECH Environmental (NJ) LP

1800 Carman Street
Camden, New Jersey 08105
(609) 365-5544
FAX (609) 365-0801

SECTION A

INTRODUCTION AND GENERAL COMMENTS

A. INTRODUCTION AND GENERAL COMMENTS

The facility for which this Part A and Part B permit submittal is being made, was originally built in 1981 and started operations in early 1982 as Flowen Oil Delaware Valley, Inc. (FODV). FODV has owned and operated the facility under interim status since that time. The initial Part B permit application was filed on August 22, 1984.

This current submittal is being made by Remtech Environmental (NJ) LP. (herein after referred to as Remtech Environmental). Remtech Environmental is currently operating the FODV facility under a interim management contract. The required A-901 disclosure statements have been submitted to the State of NJ and upon final approval, Remtech Environmental will finalize the purchase of FODV and become both owner and operator.

The designation "Remtech Environmental" is used in place of "FODV" throughout the application. As stated, FODV has previously filed the required permit applications and is now operating under interim status. The previous permit applications were found deficient by NJ DEP and additional information responding to the deficiencies was submitted by FODV. Remtech Environmental found that the supplemental information submitted to NJ DEP required to be re-organized. This application is submitted to provide such re-organization.

Furthermore, the facility has previously lacked the financial resources to fully implement routine maintenance, repairs and process improvements that were needed to meet the ever increasing regulatory requirements promulgated since the plant was built. Remtech Environmental has invested in the facility to allow completion of these improvements. Therefore, this reorganized permit application also provides information on these improvements, both completed and proposed.

The facility located in Camden, NJ, is described in detail in Section D of this application. In brief, the facility is an waste oil treatment facility, constructed to be above the 100 year flood plain. on approximately 1 acre. The entire facility is on concrete with 6 inch curbs to allow the facility to be self containing in the event of a spill. Section D provides a full description.

The facility, as built in 1981, was designed to separate oil from water and/or sediment. The original process was based on storage in tanks, heating, filtration, pH adjustment and centrifuging. Economic processing was really optimum only when incoming oil wastes had relatively limited amounts of water and sediments.

The facility designers could not foresee both the wide range of oil wastes that ultimately would be regulated by the State of NJ, and the economic downturn in prices for recycled oil as a finished product. Now, the large number of oil waste materials regulated by the State of NJ has resulted in an increased customer demand for oil waste treatment services that can handle a diverse range of oil wastes including materials with much higher levels of water and sediment. To this end, the facility has been under improvement by increasing its capability to process higher sediment, higher water level waste materials. This Part B submittal includes a detailed process description in Section F, along with the final construction schedule for these improvements.

An example of a facility upgrade includes the addition of a solid bowl centrifuge that allows the facility to economically remove much higher levels of sediment. A second solid bowl centrifuge is also included in the process description.

An ultra-filtration unit has been added to pre-treat water prior to discharge to the sewer system. This is in agreement with the requirements of the discharge permit held under the authority of the Camden County Municipal Utilities Authority.

To improve the ability to separate oil from water, an emulsion breaking system is included in the application. It is important to note, all of the process design improvements only increase the ability of the facility to efficiently treat materials utilizing processes that were included in the scope of the original design; i.e.- heating, separation of oil, pH adjustment, removal of water, centrifuging to remove sediment, and filtration to remove solids. Therefore, the process improvements are consistent with the Treatment Operations described in the facility interim status permit.

The facility is approved to handle NJ DEP hazardous waste codes X721 to X728. The physically and chemically similar oil wastes identified by USEPA hazardous waste codes K048 to K059 can be handled by the treatment process of the facility.

Some waste materials that have petroleum oil fraction as a component will demonstrate a flash point less than 140 F. If these liquid oily wastes do not meet the source generating definitions listed of X721 - X728 or K048 - K059, then the waste would be correctly classified as D001. While the material is still the same oily waste, the facility would not be able to accept the D001 waste due to permit definitions, even though the facility could accept the waste if the waste were able to be classified legally as an X code or K code. The facility is designed and operated to safely handle materials with flash points less than 140 F but greater than 100 F. This permit application requests the inclusion of limited acceptance of D001 wastes oily liquid to allow acceptance of oily wastes that can be handled but would otherwise need to be rejected due to classification as D001.

One major issue associated with the acceptance of both non-RCRA hazardous wastes (X-codes) and RCRA hazardous wastes (D001, K048-K059) is the need to segregate the by-products. The application has been amended to include this required segregation.

The Waste Characteristics and Waste Analysis Plan (Section E) and Process Information and Engineering Design (Section F) have been updated to clearly show that wastes that are RCRA hazardous will be handled separately in the process, the by-products will be addressed uniquely in the waste analysis plan, and decontamination and record keeping procedures are addressed when equipment is transferred from RCRA hazardous waste handling to non-RCRA, NJ DEP X code material processing.

The Site Contingency Plan (Section I), Procedures to Prevent Hazardous (Section G), and Personnel Training Program (Section J), have been updated to reflect the addition of a K048 to K059 and D001 waste codes.

The Closure Plan (Section K) has been revised to properly address the inclusion of these RCRA hazardous waste types. The Closure plan has also been updated to include the improvements in the tank storage system.

Remtech Environmental has undertaken an extensive tank cleaning and tank improvement program. The tanks (see Section H for details) are being fitted with high level alarms and automatic cut off system that will eliminate the potential for overflow of tanks.

The tank storage area that is located south of the process building, (Drawing I in Section F) was originally designated for finished product only. The secondary containment in this area however, is sufficient for additional tanks. Consistent with the process improvements that allow the facility to handle some larger volume waste streams, (for example, water containing oil from customer spill clean up activities) this application includes the addition of two additional 25,000 gallon storage tanks in this area. In addition, four of the six tanks would be designated for both waste and product storage use. This capacity increase for waste storage in tanks will allow for significant improvements process efficiencies. The application includes this proposed increase in all applicable permit application sections, including a revised Closure Cost Estimate (Section K).

To further improve the ability to be fully self contained an automatic cut off valve is being installed at the discharge point where the facility connects to the public sewer. This device is fully described in this submittal (see Drawing K in Section F as well as Section G). This system will detect extremely low levels (ppm) of hydrocarbons and automatically shut off the discharge to prevent oil from entering the public sewer system.

The facility, therefore , in addition to being constructed on concrete with 6 inch curbs, is both physically isolated from discharging onto adjacent properties, and is also electramechanically isolated from uncontrolled discharge. This dual containment is part of the basis for this application requesting limited drum storage for the facilities own process by-products.

The Remtech Environmental facility will not accept waste in drums from customers. However, the wastes that are generated by the treatment process may be produced in volumes small enough that drum storage would allow different by-products to be properly isolated from each other in small quantities. This, for example, would be necessary if quantities of RCRA hazardous waste were being processed. These by-products would be accumulated separately to avoid mixing RCRA hazardous waste by-products with non-RCRA hazardous waste by-products. Accumulation of these drummed by product wastes as well as by-product wastes being accumulated in roll off boxes or dump trailers, could extend beyond 90 days, while sufficient quantities are generated to allow the analyses of representative samples and obtaining final disposal approvals. The application demonstrates sufficient containment of this limited amount of material and the Closure Cost Estimate (Section K) has been modified to include provisions for up to two 25 cubic yard roll offs, or dump trailers or the equivalent volume segregated in drums.

The Inspection Procedures (Section G-2) have been modified, along with the Waste Analysis Plan (Section E) to include provisions for inspection and sampling of drums.

An updated, final construction schedule is included in Section F-3 to address the completion dates for the process improvements.

In conclusion, Remtech Environmental respectfully submits this permit application regarding the Flowen Oil Delaware Valley, Inc. facility to demonstrate that the facility is designed, constructed and operated in compliance with all applicable regulations. A permit issued on this application would allow Remtech Environmental to continue, and improve the operations that have been carried out under interim status.

RM
ERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F | N J D 9 8 0 5 3 6 5 7 7 | | D

Ref. 3
689

LABEL ITEMS

I.D. NUMBER

FACILITY NAME

FACILITY MAILING ADDRESS

FACILITY LOCATION

REMTECH ENVIRONMENTAL (NJ) LP
1800 Carman St.
Camden, NJ 08105
609-365-5544

FORMERLY FLOWEN OIL DELAWARE VALLEY INC.

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill–in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill–in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold–faced terms.

SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

NAME OF FACILITY

REMTECH Environmental (NJ) LP

FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
FLEISCHMANN, PAUL L. VICEPRES.	609 365 5544

FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

1800 CARMANSTREET

B. CITY OR TOWN	C. STATE	D. ZIP CODE
CAMDEN	NJ	08105

FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

1800 CARMAN STREET

B. COUNTY NAME

AMDEN

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
CAMDEN	NJ	08105	CMD

TINUED FROM THE FRONT

Ref. 3
799

C CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
2992 (specify)	7 (specify)
C. THIRD	**D. FOURTH**
(specify)	7 (specify)

PERATOR INFORMATION

A. NAME: REMTECH Environmental (NJ) LP

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL, S = STATE, P = PRIVATE, M = PUBLIC (other than federal or state), O = OTHER (specify)
P (specify)

D. PHONE (area code & no.): A 609 365 5544

E. STREET OR P.O. BOX: 1800 CARMAN STREET

F. CITY OR TOWN: CAMDEN

G. STATE: NJ

H. ZIP CODE: 08105

IX. INDIAN LAND
Is the facility located on Indian lands? [ ] YES [X] NO

XISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): PENDING	D. PSD (Air Emissions from Proposed Sources): C T A 9 P
B. UIC (Underground Injection of Fluids): C T I 9	E. OTHER (specify): (specify)
C. RCRA (Hazardous Wastes): PENDING	E. OTHER (specify): C T I 9 (specify)

REFER TO PART B APPLICATION SECTION L - WHICH IDENTIFIES ALL CURRENT AIR PERMITS

MAP

ttach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste ment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface ter bodies in the map area. See instructions for precise requirements.

ATURE OF BUSINESS (provide a brief description)

Engaged in the storage, processing, blending, treatment and disposal of used oils, oily waste materials, oil/water emulsions, and oil contaminated water. Engaged in the resale of recycled oil, discharge of treated water to POTW and the shipment of waste process by-products offsite for disposal.

II. CERTIFICATION (see instructions)

rtify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all tachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the plication, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting lse information, including the possibility of fine and imprisonment.

ME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
L L. FLEISCHMANN, VICE PRESIDENT	L L Fleischmann	4/25/89

MENTS FOR OFFICIAL USE ONLY

rm 3510-1 (Rev. 10-80) Reverse

...in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

Ref. 3
889

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

	F	N	J	D	9	8	0	5	3	6	5	7	7

OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

FIRST OR REVISED APPLICATION

Mark "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

YR.	MO.	DAY
81	06	10

☐ 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

REVISED APPLICATION *(place an "X" below and complete Item I above)*

☒ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

PROCESSES — CODES AND DESIGN CAPACITIES

PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	G

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

DUP (F/A: C)

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G	
X-2	T03	20	E	
1	S01	10,100	G	
2	S02	355,000	G	
3	T01	30,000	E	
4	T01	6,000	E	
5	T04	12,000	E	
6	T04	4,200	E	
7	T04	4,080	E	
8	T04	3,600	E	
9				
10				

ESSES (continued)

OR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE E DESIGN CAPACITY.

Ref. 3

999

REFER TO PAGES 2b,2c and 2d of this application.

RIPTION OF HAZARDOUS WASTES

AZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you dle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteris- and/or the toxic contaminants of those hazardous wastes.

ATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual or each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled ch possess that characteristic or contaminant.

OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate re:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

ty records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into unt the appropriate density or specific gravity of the waste.

ESSES

OCESS CODES:

listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess t characteristic or toxic contaminant.

te: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

ROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by than one EPA Hazardous Waste Number shall be described on the form as follows:

Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.

column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter ncluded with above" and make no other entries on that line.

Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

PLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes sive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated ounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
K 0 5 4	900	P	T 0 3 D 8 0	
D 0 0 2	400	P	T 0 3 D 8 0	
D 0 0 1	100	P	T 0 3 D 8 0	
D 0 0 2				included with above

REFERENCE NO. 4

Ref. 4
1 of 69

Preliminary Assessment

FLOWEN OIL DELAWARE VALLEY
1800 Carmen Avenue
Camden/Camden County

Ref. 4
2 of 69

FLOWEN OIL
1800 Carmen Avenue
Camden/Camden County

Flowen Oil Delaware Valley Corp. is a reprocessing facility for used oils. Flowen Oil vehicles collect the waste oil from customers and bring it back to the Camden facility to be reprocessed.

Although their process is similar to most reprocessing companies, Flowen Oil does not have the quality control that other companies have. Reports of several spill incidents and internal administrative problems suggest that the company is not well run.

However, since the facility does have some environmental control, and NJDEP-BFO and CCMUA are taking regulatory action against the company, I am giving this site a low priority.

Helen E. Kornitas
HSMS IV

Hours Worked: 32

Ref. 4
3869

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER: 0980536577

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Flowen Oil Delaware Valley Corp.	1800 Carmen Avenue

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Camden	NJ	08105	Camden		

09 COORDINATES LATITUDE	LONGITUDE	
39° 56' 37"	75° 06' 00"	Block 1431, Lot 1

10 DIRECTIONS TO SITE (Starting from nearest public road)
Take Rte. 70 West to Marlton Pike. Take Marlton Pike to Federal Street. Make a left onto Federal St. Take this to 17th Street. Make a left. Site is one block down on the corner of 17th & Carm n.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
Stockholders based in Texas				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**	
	TX		( )	
07 OPERATOR (If known and different from owner)	**08 STREET** (Business, mailing, residential)			
Archie Bilsland	1800 Carmen Avenue			
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**	
Camden	NJ	08105	(609) 365-5544	

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER OPERATION NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES ☐ NO DATE 3 27 84 (MONTH DAY YEAR)

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)	03 YEARS OF OPERATION	
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	1980 (BEGINNING YEAR)	present (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Benzene, Toluene, Xylene and other products associated with oils and waste oils.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
There is a potential for contamination of the environment. However, because of the nature of the waste, it may not be a serious hazard.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspection on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Helen E. Kornitas	NJDEP/HSMA	609) 633-2218

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Helen E. Kornitas	NJDEP	HSMA	609) 633-2218	2 14 86 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

Ref. 4
4864

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	0980536577

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [ ] A. SOLID
- [ ] B. POWDER, FINES
- [ ] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [x] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS 5100 capacity

03 WASTE CHARACTERISTICS (Check all that apply)

- [x] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [ ] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	5100	drums	storage capacity
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	MEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OLW	Waste Oils	999	Above ground tank farms		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports.)

All information is taken from DWM/BFO, Red Lion Office Files.
First Supplement to Application for Solid Waste Permit (Attachment A)
Letter to Senator Rand from Jack Stanton-DWM (Attachment B)
Memo from Steve Carfora to Ronald Corcory (Attachment C)

Ref. 4
5769

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER: 0980536577

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A GROUNDWATER CONTAMINATION | 02 [ ] OBSERVED (DATE: _____) | [X] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

Uncontained discharges of oil may penetrate soil and reach groundwater. (Attachment D)

01 [X] B SURFACE WATER CONTAMINATION | 02 [ ] OBSERVED (DATE: _____) | [X] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

Although surface water contamination is highly unlikely, if oil is uncontained, it is possible. (Attachment E)

01 [ ] C CONTAMINATION OF AIR | 02 [ ] OBSERVED (DATE _____) | [ ] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

01 [ ] D FIRE/EXPLOSIVE CONDITIONS | 02 [ ] OBSERVED (DATE _____) | [ ] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

01 [ ] E CONTAMINATION OF FOOD CHAIN | 02 [ ] OBSERVED (DATE _____) | [ ] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

01 [X] F CONTAMINATION OF SOIL | 02 [X] OBSERVED (DATE 8/20/85) | [ ] POTENTIAL | [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) | 04 NARRATIVE DESCRIPTION

Oil spill contaminated soil located on a nearby resident's land. (Attachment D)

01 [ ] G DRINKING WATER CONTAMINATION | 02 [ ] OBSERVED (DATE _____) | [ ] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

01 [X] H WORKER EXPOSURE/INJURY | 02 [ ] OBSERVED (DATE _____) | [X] POTENTIAL | [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

Workers may be exposed to hazardous substances when oil spills occur. (Attachment D)

01 [ ] I POPULATION EXPOSURE/INJURY | 02 [ ] OBSERVED (DATE _____) | [ ] POTENTIAL | [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

J. DAMAGE TO FLORA
NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

K. DAMAGE TO FAUNA
NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

L. CONTAMINATION OF FOOD CHAIN
NARRATIVE DESCRIPTION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

M. UNSTABLE CONTAINMENT OF WASTES
02 ☒ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Several spills have occurred onsite. Most of the spills were contained, but a few were not. (Attachment D)

N. DAMAGE TO OFFSITE PROPERTY
NARRATIVE DESCRIPTION
02 ☒ OBSERVED (DATE 8/20/85) ☐ POTENTIAL ☐ ALLEGED

Oil from a Flowen Oil truck contaminated soil at Penn Jersey Auto yard and a neighboring resident's yard. (Attachment D)

O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
NARRATIVE DESCRIPTION
02 ☒ OBSERVED (DATE 3/30/83) ☐ POTENTIAL ☐ ALLEGED

An oil-water seperator failed and oil was discharged into the city storm drain system. (Attachment F)

P. ILLEGAL/UNAUTHORIZED DUMPING
NARRATIVE DESCRIPTION
02 ☒ OBSERVED (DATE 12/9/83) ☐ POTENTIAL ☐ ALLEGED

DEM inspection reports state excessive amounts of oil on the ground around the incoming tank farm. (Attachment G)

Q. DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

TOTAL POPULATION POTENTIALLY AFFECTED: _____

COMMENTS

Over the past few years, there have been several spills due to negligence. The company should be more careful in their process to prevent this from happening in the future.

SOURCES OF INFORMATION

Spill Incident Report (8/20/85) (Attachment D)
Ammended Notice of Violations (5/14/84) (Attachment E)
Letters concerning oil-water seperator failure (Attachment F)
Notice of Violation (12/9/83) (Attachment G)

EPA FORM 2070-12 (7-81)

Ref. 4
7 & 69

PA REASSESSMENT COVER SHEET

FACILITY NAME : Flowen Oil

EPA I.D. # : NJD980536577

ORIGINAL PRIORITY : Low

REVIEWED BY :

REASSESSED PRIORITY : Med D

COMMENTS : Reprocessing facility for used oils. Flowen vehicles collect the waste oil from customers and bring it back to the Camden facility to be reprocessed. There have been several reports of spill incidents and it is suspected that the facility is not properly run. NJDEP-BFO and CCMUA are taking regulatory action against the company. (i.e. site is Med - Deferred)
NJDEP-DWM inspection reports state excessive amounts of oil on the ground around the tank farms.
Not enough info to score

PREPARER : D. Clancy DATE : 3/2/89

Flowers Site
1800 Carman St.
Camden/Camden Co

Ref. 4
8869

PRELIMINARY ASSESSMENT FILE SEARCH

NJDEP

DIVISION OF WATER RESOURCES:

A. Enforcement _____

B. Groundwater _____

C. Other _____

DIVISION OF WASTE MANAGEMENT:

A. HSMA _____

B. Enforcement Red Lion - Mike (Files)

C. Solid Waste _____

ENVIRONMENTAL QUALITY:

A. Air Pollution _____

B. Pesticides _____

C. Other _____

DIVISION OF FISH AND GAME: _____

OFFICE OF SCIENCE AND RESEARCH: _____

A. Industrial Survey _____

B. Other _____

N.J. DEPARTMENT OF HEALTH: _____

LOCAL AUTHORITIES:

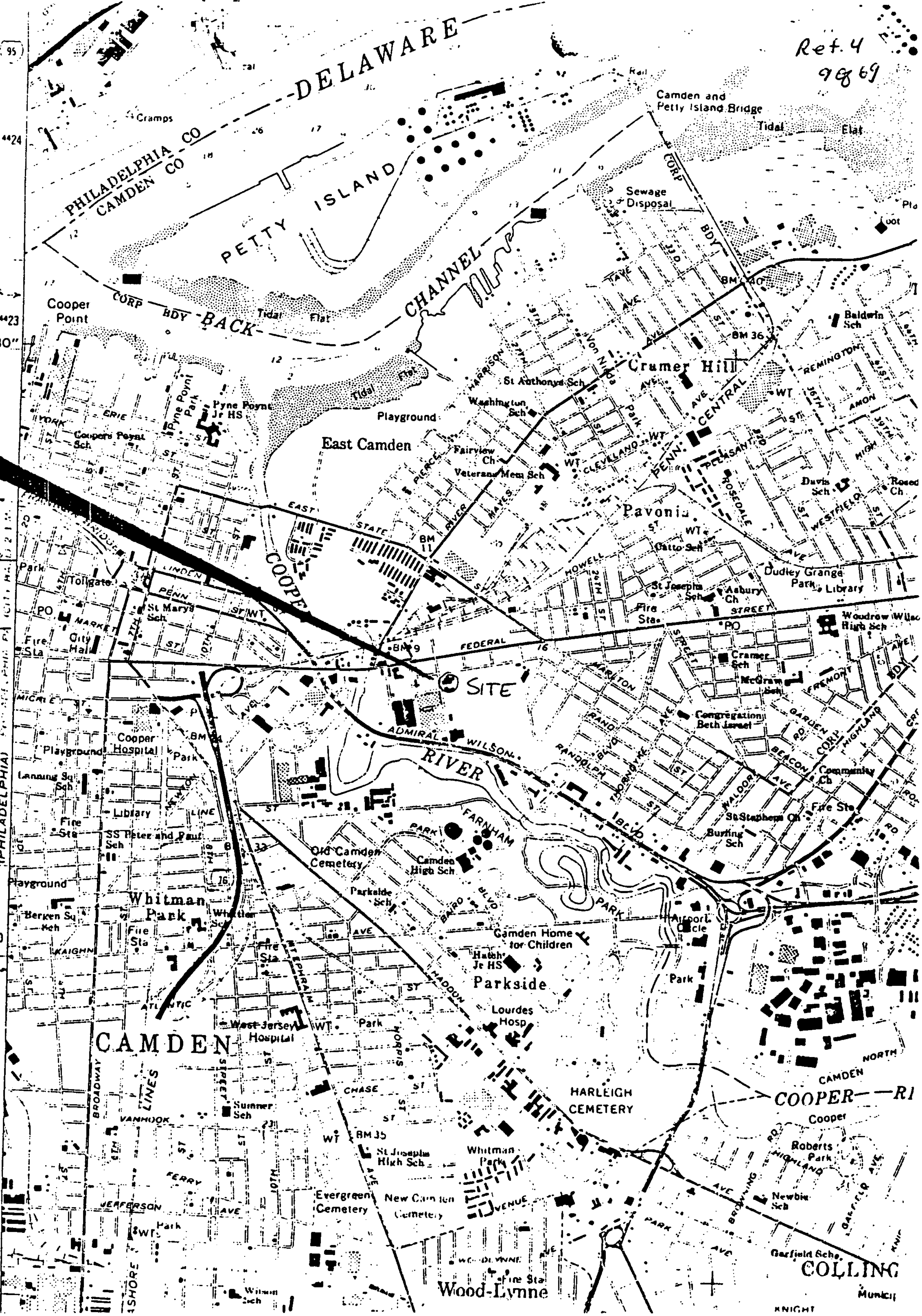
A. Health Department _____

B. ~~Town or County Clerk~~ CCMUA 541-5200 Mr. Palmer

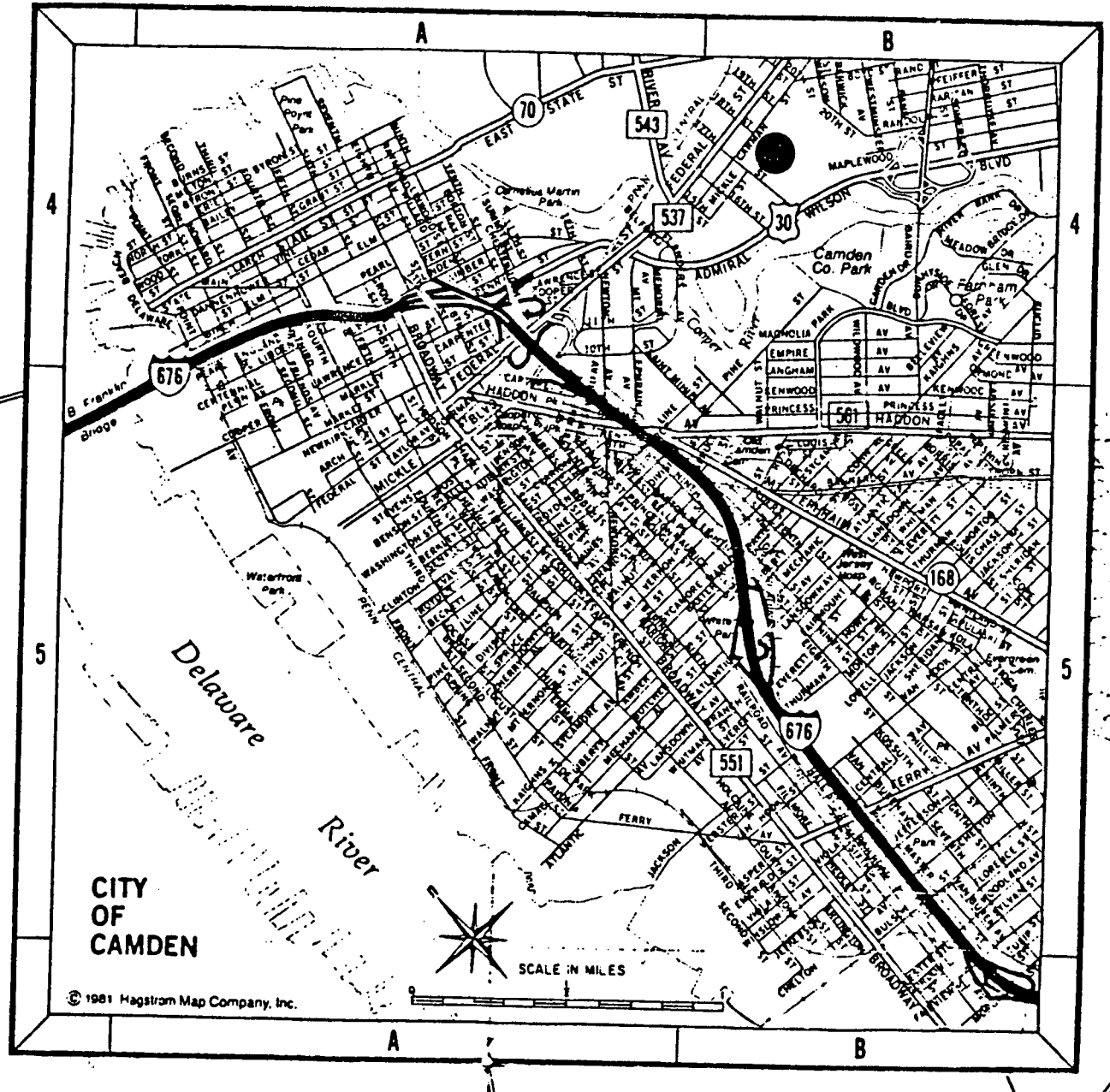
UNITED STATES GOVERNMENT:

A. EPA _____

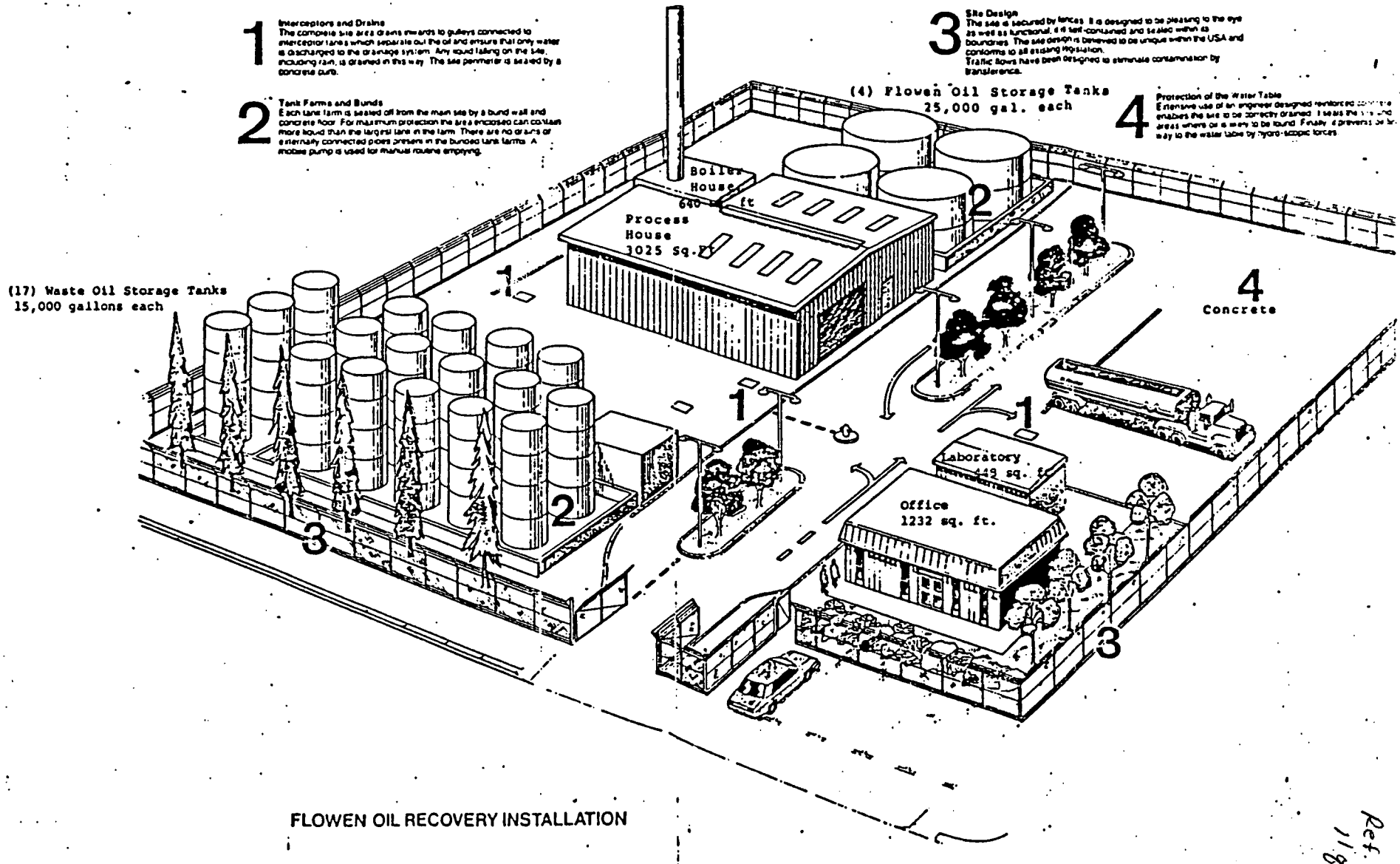
B. other _____


Ref. 4
9869
DELAWARE
PHILADELPHIA CO
CAMDEN CO
PETTY ISLAND
BACK CHANNEL
Camden and Petty Island Bridge
Tidal Flat
Sewage Disposal
Cramps
Cooper Point
Pyne Poynt Park
Pyne Poynt Jr HS
Coopers Poynt Sch
East Camden
Playground
Cramer Hill
St Anthonys Sch
Washington Sch
Fairview Ch
Veterans Mem Sch
Pavonia
Catto Sch
Dudley Grange Park
Library
St Joseph Sch
Asbury Ch
Fire Sta
Woodrow Wilson High Sch
Cramer Sch
McGraw Sch
Baldwin Sch
Davis Sch
Congregation Beth Israel
Community Ch
St Stephens Ch
Burrling Sch
COOPER RIVER
ADMIRAL WILSON BLVD
SITE
Tollgate
St Marys Sch
City Hall
PO
Cooper Hospital
Lanning Sq Sch
Library
SS Peter and Paul Sch
Whitman Park
Berken Sq Sch
Old Camden Cemetery
Camden High Sch
Parkside Sch
Camden Home for Children
Hatch Jr HS
Parkside
Lourdes Hosp
Airport Circle
Park
West Jersey Hospital
CAMDEN
Sumner Sch
St Joseph High Sch
Whitman Park
HARLEIGH CEMETERY
Evergreen Cemetery
New Camden Cemetery
Wood-Lynne
Roberts Park
Newbie Sch
Garfield Sch
COLLING
57'30"
56'37"
55'
4424
4423
4420
4419

J K L M N

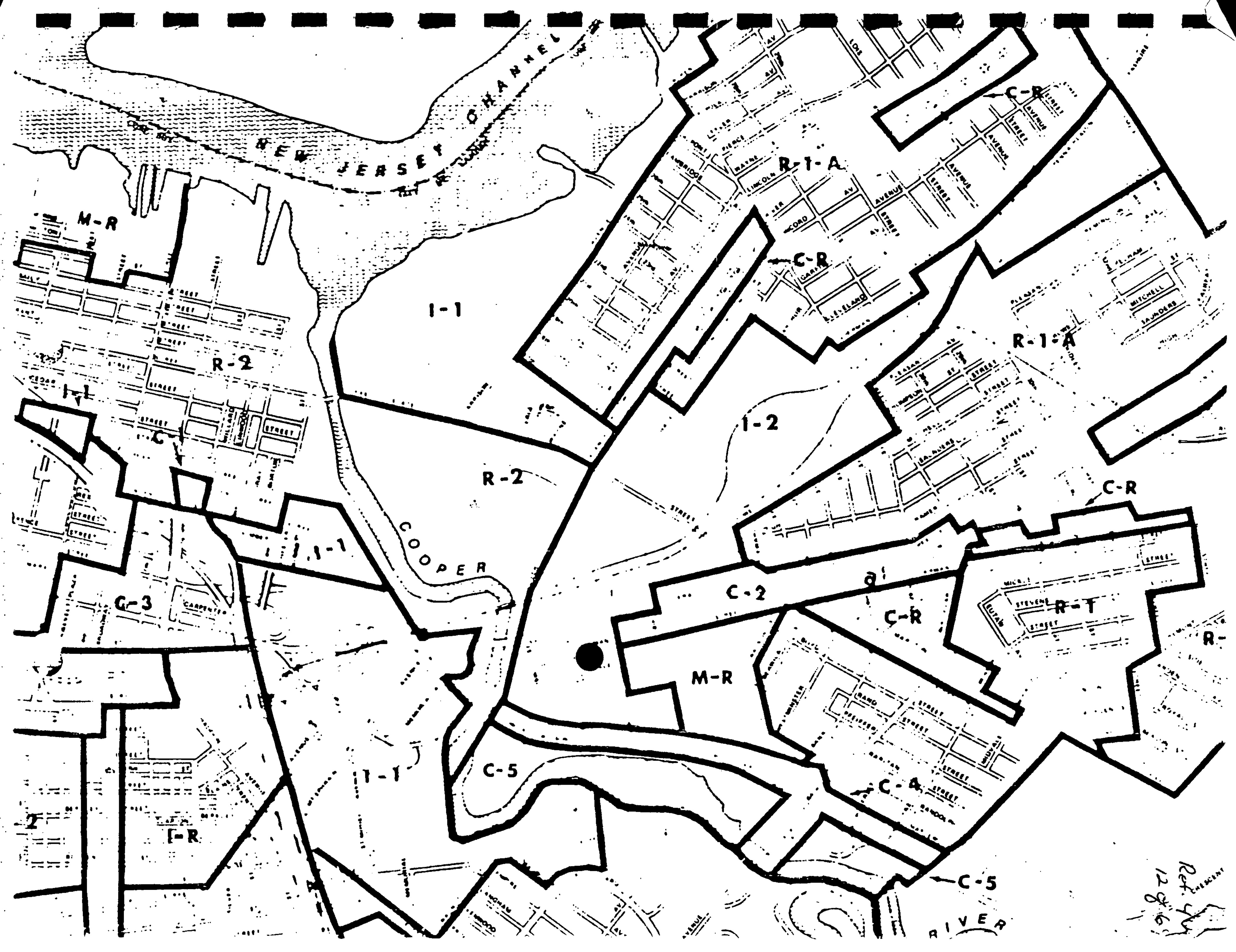


Ref. 4
10869



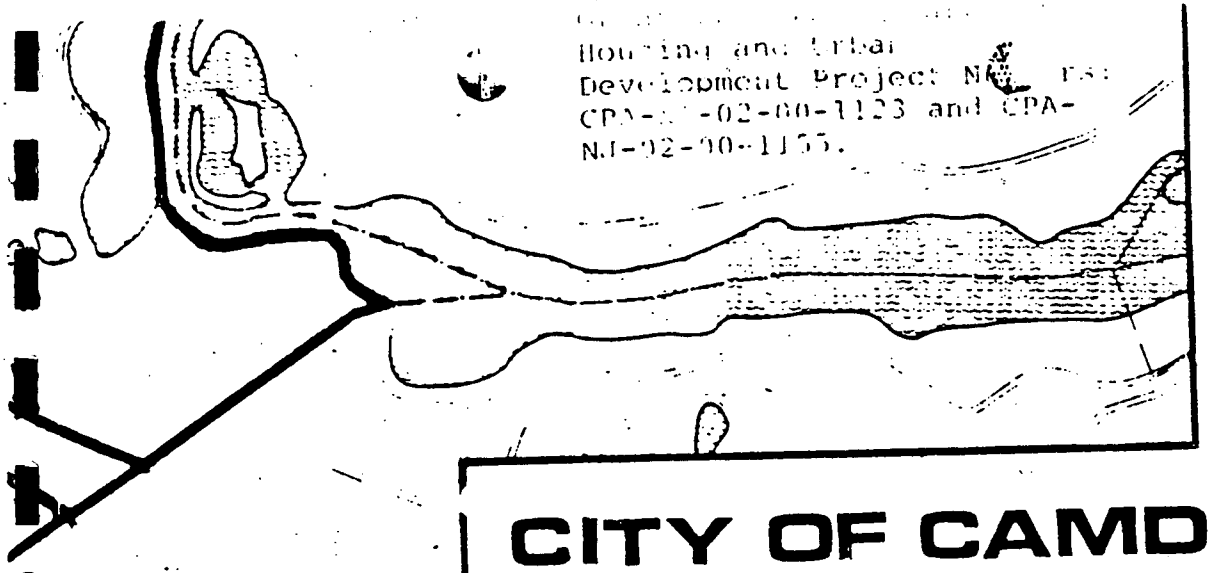
FLOWEN OIL RECOVERY INSTALLATION

Ref. 4
11869


NEW JERSEY CHANNEL
M-R
R-2
I-1
C-1
C-3
I-R
COOPER
R-1-A
C-R
I-2
C-2
R-T
C-5
C-4
RIVER
Ref. 4
12 of 6

Ref. 4
13869

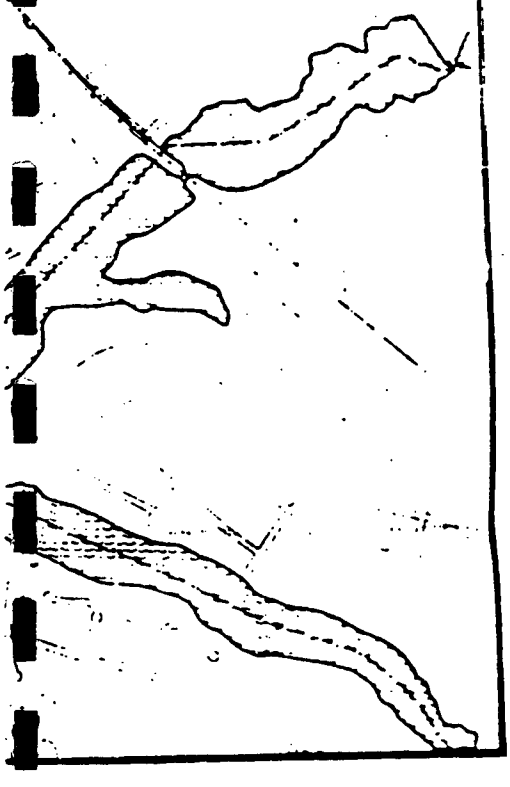
Housing and Urban Development Project No. [illegible] CPA-[illegible]-02-00-1123 and CPA-NJ-02-00-1135.

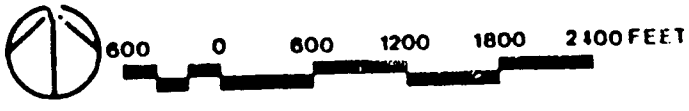


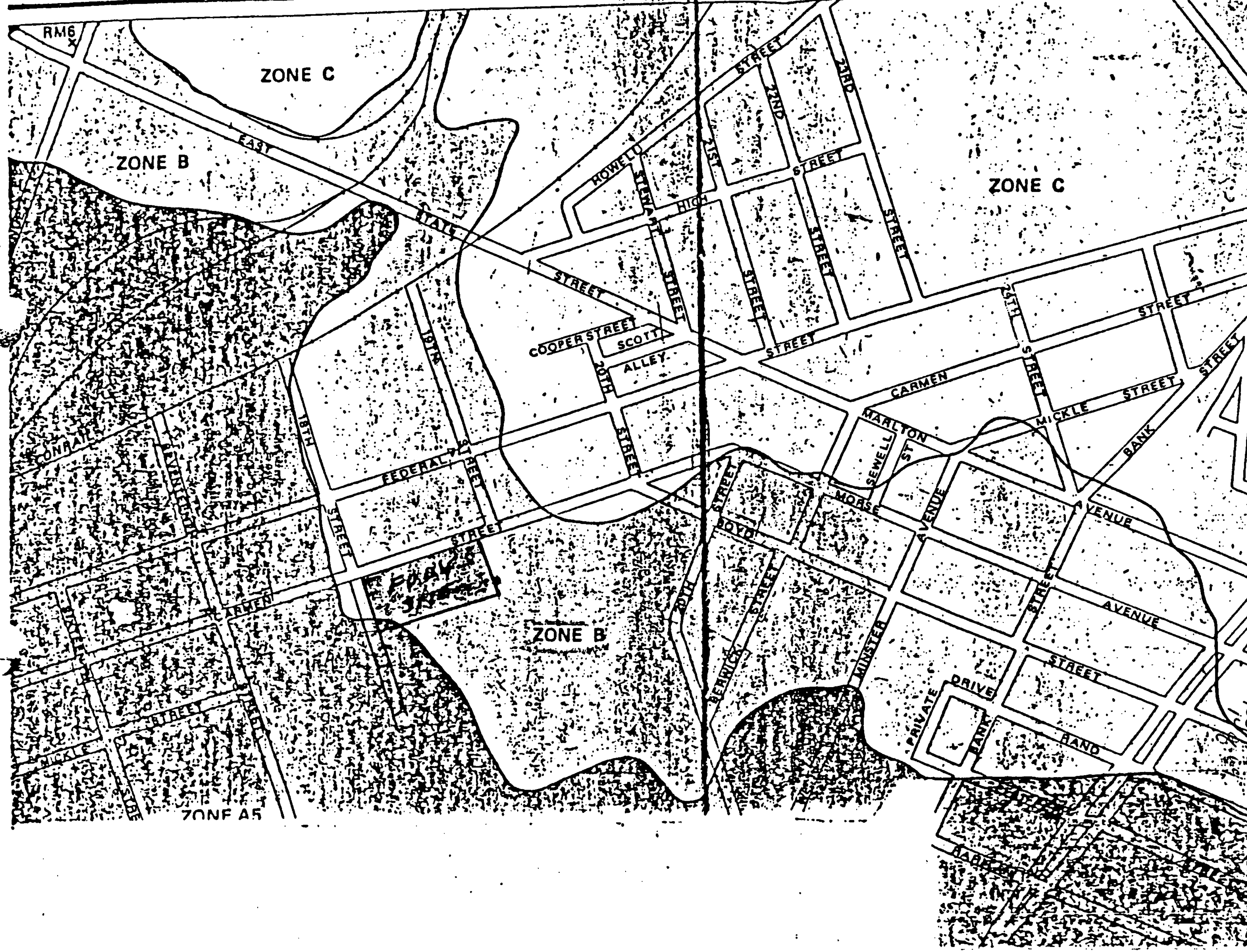
CITY OF CAMDEN
ZONING MAP
USE DISTRICTS

Exhibit 22 - City of Camden Zoning Map

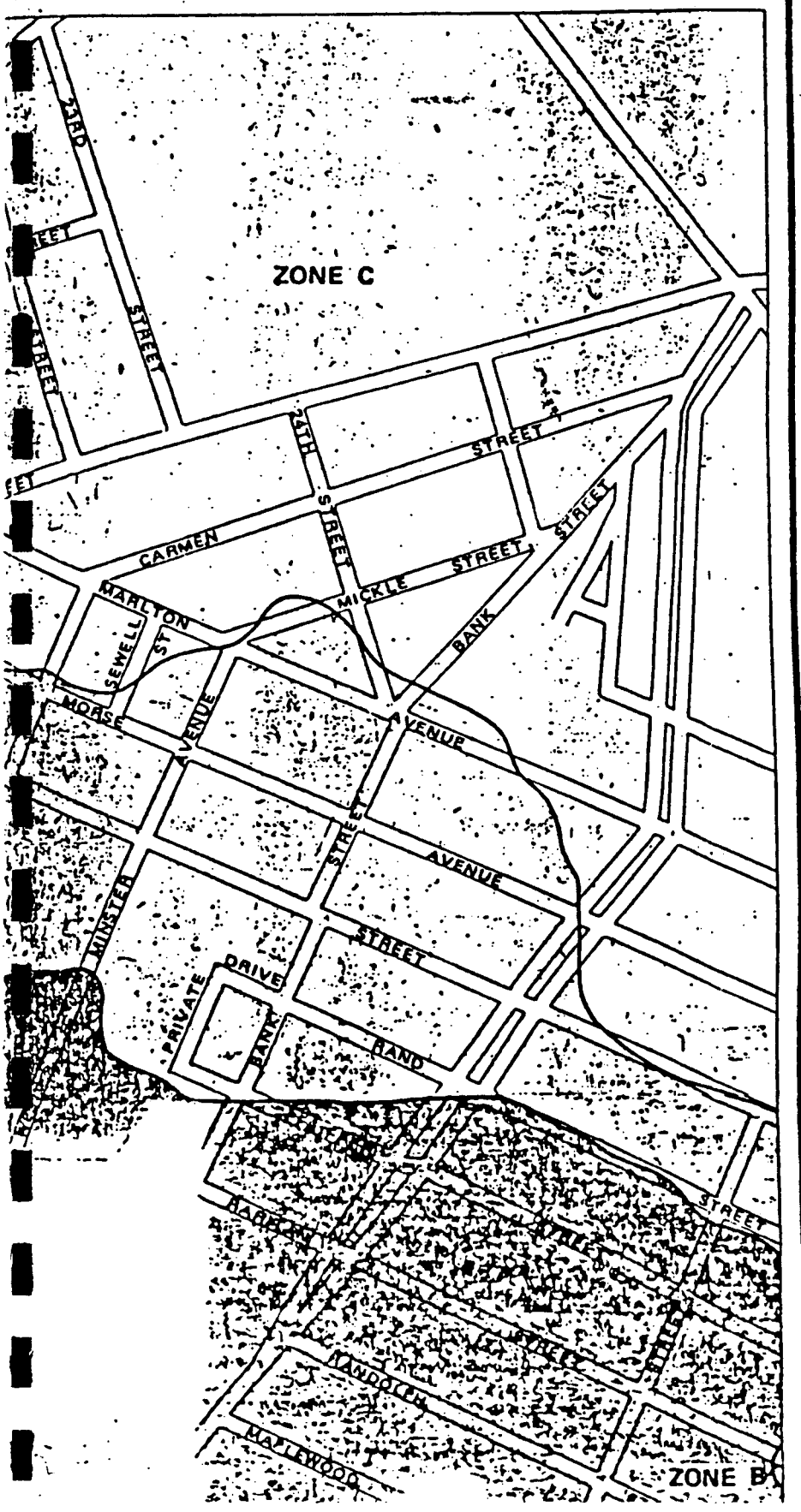
R-1-A	RESIDENTIAL
R-1	RESIDENTIAL
R-2	RESIDENTIAL
C-1	COMMERCIAL
C-2	COMMERCIAL
C-3	COMMERCIAL
C-4	COMMERCIAL
C-5	COMMERCIAL
I-1	INDUSTRIAL
I-2	INDUSTRIAL
C-R	COMMERCIAL-RESIDENCE
I-R	INSTITUTION-RESIDENCE
M-R	MANUFACTURING-RESIDENCE
C-C	CITY CENTER FLEXIBLE DEVELOPMENT DISTRICT
H-H	HIGHWAY INTERCHANGE/MASS TRANSIT RELATED FLEXIBLE DEVELOPMENT DISTRICT






RM6
ZONE C
ZONE B
EAST
STATE
STREET
HOWELL
STEWART
HIGH
21ST
STREET
22ND
STREET
23RD
STREET
ZONE C
24TH
STREET
COOPER STREET
SCOTT
ALLEY
20TH
STREET
19TH
STREET
18TH
STREET
FEDERAL
CARMEN
MARLTON
MICKLE
STREET
BANK
SEWELL
ST
MORSE
AVENUE
BOYD
STREET
BERRICK
MINSTER
AVENUE
STREET
DRIVE
PRIVATE
BANK
RAND
ZONE B
CONRAIL
SEVENTEENTH
SIXTEENTH
ZONE A5

Ref. 4
18669



KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations* With Date of Identification e.g., 12/2/74

100-Year Flood Boundary

500-Year Flood Boundary

Base Flood Elevation Line With Elevation In Feet**

Base Flood Elevation In Feet Where Uniform Within Zone**

Elevation Reference Mark

River Mile

ZONE B

ZONE

513

(EL 987)

RM7

M1.5

**Referenced to the National Geodetic Vertical Datum of 192

*EXPLANATION OF ZONE DESIGNATION

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where dep are between one (1) and three (3) feet; average dep of inundation are shown, but no flood hazard fac are determined.
AH	Areas of 100-year shallow flooding where dep are between one (1) and three (3) feet; base flo elevations are shown, but no flood hazard fac are determined.
A1-A30	Areas of 100-year flood; base flood elevations flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flo protection system under construction; base flo elevations and flood hazard factors not determin
	Areas between limits of the 100-year flood and 5 year flood; or certain areas subject to 100-year flo ing with average depths less than one (1) foot or wh the contributing drainage area is less than one squ mile; or areas protected by levees from the base flo (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood haza
V	Areas of 100-year coastal flood with velocity (w action); base flood elevations and flood hazard fac not determined.
V1-V30	Areas of 100-year coastal flood with velocity (w action); base flood elevations and flood hazard fac determined.

Exhibit 19
Flood Plain Map

Certain areas not in the special flood hazard areas (zones A and may be protected by flood control structures.

This map is for flood insurance purposes only; it does not ne sarily show all areas subject to flooding in the community all planimetric features outside special flood hazard areas.

Ref. 4
1 of 69

FLOWEN OILS DELAWARE VALLEY

FIRST SUPPLEMENT TO

APPLICATION FOR

SOLID WASTE PERMIT

Ref. 4
1989

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOLID WASTE ADMINISTRATION
P.O. BOX 2807, TRENTON, NJ 08625

SOLID WASTE FACILITY APPLICATION

OFFICE USE ONLY

Date Received

Application Number

NAME OF APPLICANT: (Print) Flowen Oils Title
Delaware Valley, Inc., corporation of New Jersey

COMPANY OR TRADE NAME: Same as above

STREET ADDRESS 1800 Davis Street TELEPHONE 609-962-7100

CITY Camden STATE New Jersey ZIP CODE 08101

APPLICANT'S ☐ FEDERAL EMPLOYER I.D. OR ☐ SOCIAL SECURITY NO:

TYPE OF ORGANIZATION: (Check One) Proprietor ☐ Partnership ☐

Incorporated [XX] Municipality ☐ County ☐ State Government ☐

Federal Government ☐ Other

CORPORATE OR PARTNERSHIP DATA (If any):

a. Registered in State of: New Jersey County of: Camden
b. Date of Filing May 13, 1980
c. Agent's Name: Last: Pierce First Alfred M.I. R.
Street Address 312 Ferry Office Bldg. Telephone 609-962-7100
City Camden State New Jersey Zip Code 08101

PERSON TO HAVE PRIME ADMINISTRATIVE AUTHORITY
Name: Last Forte First Joseph M.I. F.
Telephone 609-962-7100

APPLICATION FOR: (Check One)

[XXX] New Facility
☐ Expansion of Existing Facility No.
☐ Closure of Facility No. --------
☐ Disruption of Facility No. ------

Licensed Professional Engineer Responsible For Submitting The Attached Design:

Engineers Name Thomas A. M. Fisher
Seal No. 7113
Engineering Firm's Name Fisher & Sampson
Address 929 N. Kings Highway
Cherry Hill, N.J. 08034
Telephone No. 609 667 1100

Ref. 4
1869

FACILITY TYPE: (Separate Application for Each)

A. [ ] Sanitary Landfill B. [ ] Incinerator C. [ ] Compost D. [ ] Chemical Processing & Treatment Facility

E. [ ] Resource Recovery Facility F. [ ] Transfer Station G. [ ] Shedder H. [ ] Baler

I. [ ] Sludge J. [ ] Disruption K. [x] Other Waste Oil Processing

FACILITY NAME:

This Facility: (Check One) [ ] is, [xx] is not, [ ] will be, [ ] will not be under PUC regulation. PUC License No. (If any) _____

FACILITY LOCATION: Attach Map)
Street Address _____
Municipality _____
County _____

Part of Lot 1, Block 1431
Block No. _____ Lot (s) _____
Block No. _____ Lot (s) _____
Block No. _____ Lot (s) _____

ESTIMATED FACILITY LIFE: 25 Years _____ Tons
IF EXPANSION ADDITIONAL LIFE _____ Years _____ Tons

FACILITY PROPERTY: (Check One)

[ ] Leased (Attach copy of Lease) [X] Agreement of Sale

[ ] Owned (Attach copy of Deed or Certificate of Ownership)
Owners Name: (Last) _____ (First) _____ (MI) _____
Owners Address: Street _____
Municipality _____ State _____ Zip _____

WASTE TYPE: (Check all Types Requested for Acceptance at this Facility)

SOLIDS

[ ] 10. Municipal (Household, Commercial and Institutional)
[ ] 12. Dry Sewage Sludge
[ ] 13. Bulky Waste
[ ] 17. Hazardous Waste - Dry
[ ] 18. Chemical Waste - Dry - Non Hazardous
[ ] 23. Vegetative Waste
[ ] 25. Animal and Food Processing Wastes
[ ] 26. Oil Spill Clean-up Wastes
[ ] 27. Industrial (Non-chemical)

SEPTAGE

[ ] 73. Septic Tank Clean-out Waste
[ ] 74. Liquid Sewage Sludge

LIQUIDS

[xx] 70. Waste Oil and Sludge
[ ] 72. Bulk Liquid and Semi-Liquid
[ ] 76. Hazardous Waste Liquids
[ ] 77. Liquid Chemical Waste

I certify that the information contained herein and on all attachments are true to the best of my knowledge.

Signature _____ Date _____
Name Typed _____ Title _____

Ref 4
1980

FLOWEN OILS DELAWARE VALLEY, INC

Flowen Oils Delaware Valley, Inc. is a New Jersey Corporation incorporated on May 13, 1980. The purpose of the Corporation is to own and operate a Used Oil Recycling Plant to be located between Carman and Mickel Streets in the City of Camden.

Our raw product is defined as used lubricating oil which will come from equipment such as automobile crank cases, truck and bus crank cases, industrial gear boxes, oil from bearing lubrication, oil from industrial hydraulic systems and oils used in the metal cutting machine shops. All operations, as listed above, and any similar type operations will be our source of raw product.

The process is for the recycling of used motor, lubricating and industrial oil. The operation will begin by having trucks owned by the Corporation pick up the raw product from gas stations, garages, industrial plants, and other locations for delivery to the Flowen Oil Plant. The contents of the truck will be evaluated by a lab technician for quality control purposes. The oil will be deposited in a large tank where it will remain for about three days until the water and oil have separated.

From the tank the oil will then be funneled into settlement tanks, then to an initial indirect heating process for viscosity control and then to screen for solids removal.

The oil will then pass into a second indirect heating

phase where the oil is further thinned out to permit a second stage of cleaning. Following the second process the oil passes into three steamed heated centrifuges for the removal of the final particles or solids that may still be present in the oil. Emerging from this phase, a small amount of oil will be transmitted back into the plant's own boiler fired by the Corporation's own product. The remaining oil will pass into finished product tanks where it will remain until a demand for the product is made.

Upon receipt of a demand and/or order for the product, the appropriate quality control tests will be made for customer satisfaction. The trucks will then deliver the product to the customer.

Attached to this application are the engineering drawings, maps and legal descriptions required by the Solid Waste Administration. Additionally, drawings of the buildings are included with the application.

With respect to safety devices, the entire system and processing of oil through it is monitored at each stage by well-designed instrumentation. If a failure occurs at any stage, the appropriate instrumentation will activate an automatic safety device which will immediately shut down the entire system and send out an audible alarm linked to a visual alarm and indicate where the fault is situated in the system's control panel. In addition to this the steam heated centrifuges have an automatic locking device which prevents the opening of a centrifuge lid while the core is still rotating. Finally, in the event of power

Ref. 4
21 of 69

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT

NOTICE OF VIOLATION

ID NO. 04-08B DATE 12/9/83

NAME OF FACILITY Flower Oil Del. Val. Corp.

LOCATION OF FACILITY 1800 Carman Ave. Camden

NAME OF OPERATOR Jim Caccese

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION Excessive amounts of oil on ground around incoming tank farm. This violation also noted on report of 11/17/83.
(Added at Red Lion Office after inspection) ~~two~~ violation of NJAC 7:26-9.2(A)2 and NJSA 58:10-23.11c, NJSA 58:10-23.11e

Remedial action to correct these violations must be initiated immediately. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Bruce [signature]
Investigator, Division of Waste Management
Department of Environmental Protection

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT

Ref. 4
22869

NOTICE OF VIOLATION

ID NO. 04-085 DATE 12/15/83

NAME OF FACILITY Flower Oil Del. Val. Corp.

LOCATION OF FACILITY 1800 Carmen Ave Camden

NAME OF OPERATOR Jim Crocetti

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION ① Excessive amount of oil on ground on the Carmen Ave side of the incoming Tank farm. This violation noted in reports of 11/17/83 and 12/9/83.
② Daily inspection log not kept up to date - last entry 12/13/83.

Remedial action to correct these violations must be initiated immediately. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Bruce Henry
Investigator, Division of Waste Management
Department of Environmental Protection

Ref. 4
23860

Facility Name [illegible] Oil Delaware Valley File No. [illegible]

VIOLATIONS

DATE	TYPE OF NOTICE	CITATION(S)	NOTICE DATE	TYPE	PENALTIES
2-1-82	F.N.O.V.	7:26 Sec 3(4.7)-# 48 [illegible] iiii			
			6-16-83	[illegible] $300	
			6-16-83	Adm Order	
-24-83		7:26-12.3(c)2, 7:26-9.3(a)3	6-17-83	N.O.V.	
4-21-83				[illegible]	
-3-83	N.O.V	[illegible]	5-21-84	$875.00 → PSO/A.O.	
-7-83	N.O.V	Daily Inspec log not kept [illegible] last entry 11-3-83			
12-9-83	N.O.V.	oil on ground [illegible] 7:26-9.2(b)2			
		NJSA 58:10-23.11c, 58:11-23.11u	2-23-84	N.O.V. [illegible]	
-15-83	N.O.V.	oil on ground - Inspec log not updated	3-14-84	N.O.V. [illegible]	$2,315 [illegible]
-1-84	N.O.V.	N.J. Manifest # 0197524	6-15-84	PSO/AO	$2,250.00
2-27-84	N.O.V.	NJAC 7:26-9.4(f)4i 7:26-7			
-12-84	N.O.V.	[illegible] on truck [illegible]			
-17-84	NOV.	Viol. of Manifest #'s 0221536, 0221550, 0221546			
		10-21-83 Inspec (7:26-7.4a1, 7.4e1 (Tug + Barge Dry Dock	7-20-84	NOV/PSO	$875.00
		10-13-83, 10-24-83, 11-3-83 Inspec - (7:26-3.4h, 7.5g2, 7.6a2, 9.4d4i, 12.3e2	#7-20-84	NOV/PSO	$1500.00
4-26-84	NOV	NJAC 7:26-7.4a2			
6-15-84	NOV	NJAC 7:26-7.1 - rescinded - 6-27-84			
8-27-84	NOV	NJAC-7:26-9.4g5iii, 9.4g5iv, 9.6f4, 9.7e, 9.7g, 9.7i2, 9.4d4i.			
-11-84	FNOV	load [illegible]			
		7.5(d)13iii, 15, 16(ii), 18. 9.7(e)(6)	12-15-84	PSO/AO	$700
		7.5(c)2, 7.6(a)2	12-14-84	NOV/PSO	$500
-25-84	FNOV	7.5(d)13iv, 15, 18, 16ii 3.4(h)			
		7.5(c)2, 7.6(a)2	5-11-84	NOV/PSO	$1750
		23.11c, e	5-14-84	Amend NOV/PSO	$600
		Boston Whaler 7.4(a)1	5-16-84	NOV	
		Washington Post "	"	"	
		Naval Air Sta "			
12-28-84	FNOV	9.3(a),			
12-28-84		12.3(h)3	5-7-85	NOV/PSO	$500
-4-85	FNOV	12.3(e)2			

Ref. 4
2986 9

NJDEP INSPECTION FORM

Report Prepared for:

Generator [X]

Transporter [X]

HWM (TSD) facility [X]

Facility Information

Name: Flowen Oil Delaware Valley Corp.

Address: 1800 Carmon Ave
Camden, N. J. 08105

Lot: 1 Block: 1431

County: Camden

Phone: (609) 365-5544

EPA ID#: NJD980536577

Date of Inspection: 3/27/84

Participating Personnel

State or EPA personnel: Bruce Venner

Facility personnel: Jim Caccese

Report Prepared by Name: Bruce Venner

Region: I Southern

Telephone #: (609) 859-2958

Reviewed by: 5/10/84 TP

Date of Review:

Ref. 4
2 of 69

Summary of Findings

Facility Description and Operations

Flower Oil Del Val Corp. is a processing facility for waste oils. Flower Oil vehicles (and independent haulers) collect waste oil from facilities and service stations and bring it back to the Flower facility for processing. The basic process is as follows: ~~The oil is~~ After the load is tested for BS&W and flash (if necessary) any water is decanted through an oil interceptor system. The oil is then unloaded into a screen system to collect any debris in the oil. From here the oil is placed into a storage tank farm according to the suspended water content. When processed the oil is taken from the tank farm and heated. After the ~~the~~ primary heaters the oil goes to a shaker filter and break tank where chemicals are added to help the water precipitate out. The water goes to the interceptor system and the oil is reheated and sent to the Flower oil filters. This material is the final product and is then pumped to the Flower oil product tank farm.

Ref 4
26964

Describe the activities that result in the generation of hazardous waste.

Hazardous waste is generated in the form of solids or heavy sludge when the interceptors and the filters are cleaned.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

The hazardous waste in the incoming tank farm consists of 24,000 gallons of waste oil. NJ Hazardous Waste - x series, EPA waste type code D003 reactive.

Approval Condition for Flowen Oils Delaware Valley, Inc., Camden, Camden County

Ref. 4
2/8/84

The Certificate of Approved Registration and Engineering Design Approval issued to "Flowen Oils Delaware Valley, Inc." on June 10, 1981 is hereby amended to include the addition of a chemical injection unit, to be used to reduce the water content of the waste oil before it is pumped to the process house.

This Amended Certificate of Approved Registration and Engineering Design Approval (Amendment) is granted only for the operation of the chemical injection unit, as described in the engineering drawings and narrative prepared by Mr. Joseph T. Wozny, P.E., dated December 13, 1982, and the notification letter submitted by Mr. James Caccese, dated October 7, 1982.

This Amended Certificate of Approved Registration and Engineering Design Approval shall be conditioned upon compliance and implementation of the following:

1. This Amendment shall only apply to the permitted use of a chemical injection unit, which shall be solely used for the purpose of injecting chemicals that will promote a more efficient oil-water separation process in Tanks 1-2, Tanks A and B, the "A" Line into the process house, and the "B" Line into the process house. The construction of the chemical injection system shall be according to Drawing No. FO-PS-1, prepared by Joseph T. Wozny, P.E., dated December 9, 1982. The operation of the system shall be as stated in the December 13, 1982 and October 7, 1982 leters, signed by Joseph T. Wozny, P.E. and James Caccese, respectively.

2. This Amendment shall not be construed to allow for the acceptance by Flowen of any additional waste types, other than those permitted in Condition 14 of the original Certificate of Approved Registration and Engineering Design Approval, dated June 10, 1981. Newly promulgated regulations, effective January 17, 1983, have designated certain types of waste oil as toxic wastes. All of the waste types Flowen has been permitted to accept have been listed as toxic wastes. The corresponding NJDEP hazardous waste numbers are:

   X721 — Waste automotive crankcase and lubricating oils from automotive service and gasoline stations, truck terminals, and garages.

   X726 — The following used and unused waste oils; metal working oils; turbine lubricating oils; diesel lubricating oils; and quenching oils.

   The NJDEP hazardous waste number for bottom sludge generated from the processing and treatment of waste oil is X728.

3. Process Description

   The chemical injection unit shall be operated as described in the previously mentioned letters dated December 13, 1982 and October 7, 1982. The following is a description of the process:

Ref. 4
2896

The demulsifier agent can be injected into the following:

1. The "A" line or "B" line at a point between tanks A or B and the process house.

2. Tanks A or B.

3. Tanks 1-12.

The point of injection will be determined by the quality of the waste oil into which the demulsifier is injected. When the injection process is completed, all valves will be closed.

5. Equipment Description

The following equipment, as discussed in the previously mentioned December 13, 1982 and October 7, 1982 submittals, signed by Joseph T. Wozny, P.E., and James Caccese, is hereby authorized to be implemented as part of a chemical injection unit for waste oil treatment:

1. One 55 gallon P.V.C. tank, mounted together on a 2 1/2' x 3' metal platform.

2. One 1/4 horsepower electric motor with a pumping capability of 0 to 17.8 gallons per hour.

All equipment, including valves, shall be located as shown on Drawing Number FO-PS-1, prepared by Joseph T. Wozny, P.E., dated December 9, 1982.

6. Reporting Requirements

Flowen Oils Delaware Valley, Inc. shall submit a report detailing the progress with the system and also the advantages/disadvantages of using the chemical injection system within one (1) year of the date of this Amendment. The report shall include more definitive operating procedures, which could not be answered in Flowen's December 13, 1982 submittal due to a lack of production experience with this type of unit.

Ref. 4
28969

MODIFIED APPROVAL CONDITION FOR FLOWEN OIL DELAWARE VALLEY, INC.,
CAMDEN, CAMDEN COUNTY

The Amendment to Engineering Design Approval issued to Flowen Oil Delaware Valley, Inc. on January 18, 1983 is hereby revised to allow for the acceptance by Flowen Oil of certain additional waste types.

This revision to the Amended Certificate of Approved Registration and Engineering Design Approval is granted in response to the written request for approval to accept additional waste types by Mr. James Caccese dated March 9, 1983. This revision is granted to allow Flowen Oil to accept certain additional waste types and shall be included as a Modified Condition 2 of the January 18, 1983 Amendment.

Condition 2 shall hence be modified and implemented as follows:

Waste types identified by NJDEP hazardous waste numbers, which Flowen Oil shall be permitted to accept are:

X721 Waste automotive crankcase and lubricating oils from automotive service and gasoline stations, truck terminals and garages.

X722 Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks.

X724 Waste petroleum oil generated when tank trucks are cleaned.

X726 The following used and unused waste oils: metal working oils; turbine lubricating oils; diesel lubricating oils; and quenching oils.

Flowen Oil shall be conditionally permitted to accept waste types, X725 and X727 as follows:

X725 Oil spill cleanup residue which: a) is contaminated beyond saturation, or; b) the generator fails to demonstrate that the spilled material was not one of the listed hazardous waste oils. Acceptance of waste type X725 is conditional in that the waste shipment must be free-flowing and must be pumped into tanks 1-12 and/or tanks A or B upon arriving at the facility.

Under no circumstance shall contaminated soil, manifested under the waste type X725, be accepted by the facility.

X727 Waste oils from the draining, cleaning or disposal of electric transformers. Acceptance of waste type X727 is conditional in that the PCB content shall be determined for each waste shipment arriving at the facility and the shipment shall be accepted only if the PCB content is less than 50 ppm or less than any future concentration limit set by the Department or Federal agencies.

The NJDEP hazardous waste number for bottom sludge generated from the processing and treatment of waste oil is X728.

Ref 4
3086

MODIFIED APPROVAL CONDITION FOR FLOWEN OIL DELAWARE VALLEY, INC.,
CAMDEN, CAMDEN COUNTY

==========

Any waste oils containing PCB's (Polychlorinated Biphenyls) at a concentration greater than 50 ppm or greater than any future concentration set by the Department or Federal agencies; or; that is reactive or incompatible with permitted waste types shall not be accepted by Flowen Oil. A waste oil shipment contaning PCB's at a concentration greater than 50 ppm or greater than any future concentration set by the Department or Federal agencies, or; is otherwise of a type which the facility is not authorized to handle shall be dealt with in accordance with N.J.A.C. 7:26-9.4(c).

==========

Ref. 4
3 pg 69

Item	Process Name	Capacity
1 Steel Tank	RECEIVING TANK	700 gal
2-3 Mono MD 80 Pump	YARD PUMPS	5000 gal/hr
4 Steel Tanks (12)	WASTE OIL STORAGE	15,000 gal ea
5-6 Steel Tanks (2)	PRE-PRODUCTION TANKS	15,000 gal ea
7-8 Mono MD 70 Pump	PRIMARY PUMP	1800 gal/hr
9 Midcon Four Bank Heat Exchange	PRIMARY HEAT EXCHANGER	1800 gal/hr
10-13 Russel Finex Vibrating Filter	VIBRATING SIEVE	900 gal/hr
14-15 Receiving Tank	BREAK TANK	750 gal
16-17 Mono MD 70 Pump	SECONDARY PUMP	1800 gal/hr
18 Midcon Four Bank Heat Exchanger	SECONDARY HEAT EXCHANGER	1800 gal/hr
19-22 Sharples 1500 Gravitrol Centrifuge	CENTRIFUGE	900 gal
23-24 Mono MD 70 Pump	FLOWEN PUMP	1800 gal/hr
25-26 Centrifugal Pump	INTERMEDIATE WATER PUMP	4000 gal/hr
27 Steel Tank	SETTLING TANK	1700 gal
28-29 Centrifugal Pump	RECIRCULATION PUMP	4000 gal/hr
30 Midcon Two Bank Heat Exchanger	WATER CALORIFIER	1800 gal/hr
31 Steel Tanks (4)	FLOWEN TANKS	25,000 gal ea

Exhibit 5A
Flowen Process Equipment Schedule

JRN: 104

CONSTRUCTION OFFICIAL

Ref. 4
328 69

CITY OF CAMDEN

CONSTRUCTION ENFORCING AGENCY—DEPARTMENT OF COMMUNITY DEVELOPMENT

CONSTRUCTION PERMIT

DATE ISSUED: August 17, 1981

PERMIT NO 81-30

APPLICANT: Flowen Energy Corp.

ADDRESS: P.O. Box 2440
Orange, Texas 77630

PHONE: (713) 883-0926

CONTRACTOR: Costanza Contractiong Co.

ADDRESS: 6515 Crescent Blvd.
Pennsauken, N.J.

PHONE: 662-1000

LOCATION OF SUBJECT PREMISES: 18th & Carmen Streets.

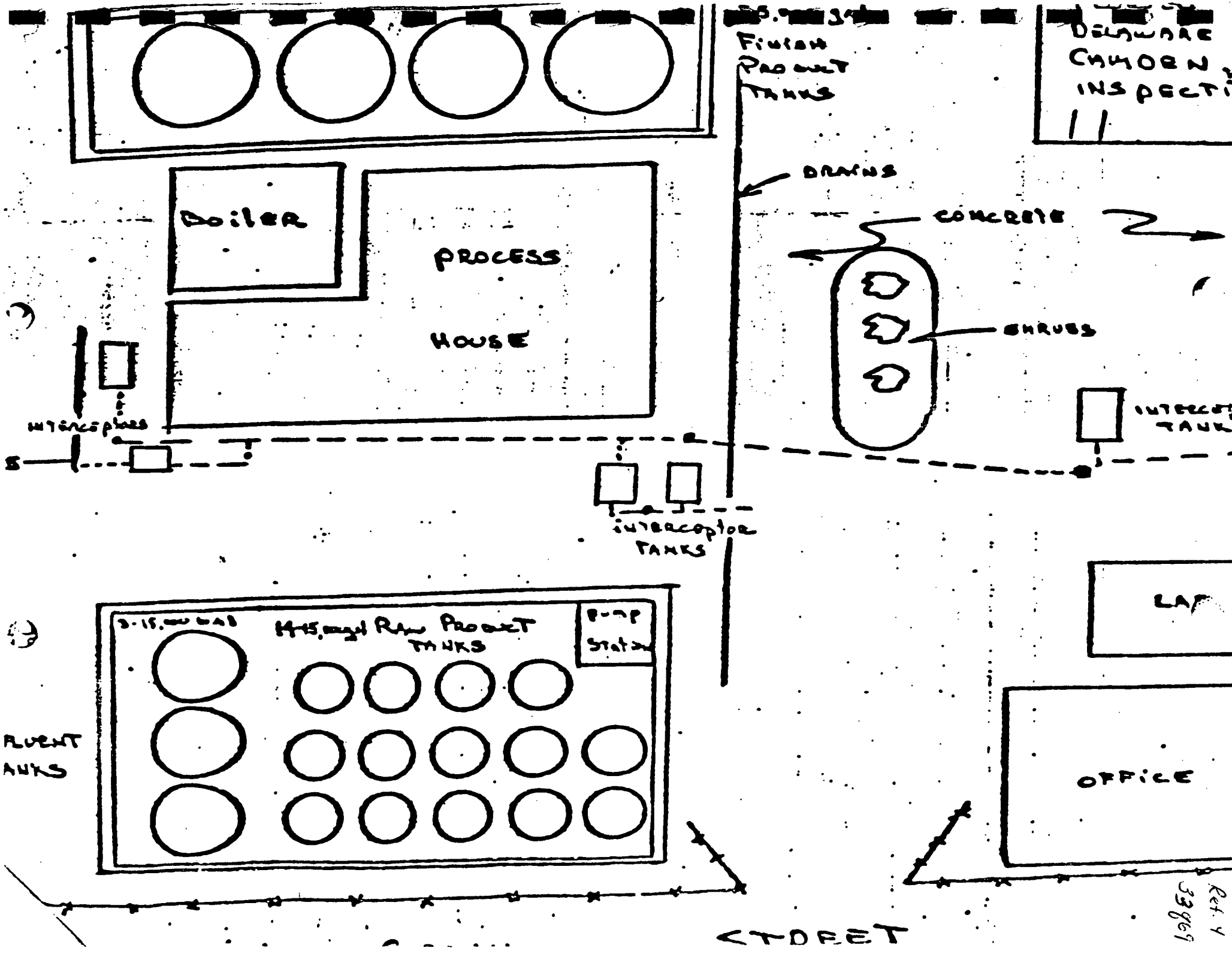
REMARKS: Oil recovery station and offices, excavation and partial foundation work

(FOR OFFICIAL USE ONLY)

Total permit costs. $810.79

Issued by: Leonard DiMedio

LEONARD DIMEDIO
Construction Official


Finish Product Tanks
Boiler
PROCESS
HOUSE
DRAINS
CONCRETE
SHRUBS
Interceptor Tanks
Raw Product Tanks
Pump Station
OFFICE
STREET

Ref. 4
34869

Flowen Oil Delaware Valley Inc

1800 Carman Street, Camden, N.J. 08105 • Telephone (609) 365-5544

June 7, 1982

New Jersey Department of
Environmental Protection
Solid Waste Administration
32 E. Hanover Street
Trenton, New Jersey 08625

Gentlemen:

At approximately 4:55 P.M. on May 24, 1982, while transfering oil into our tank farm, a tank was overfilled resulting in a small oil spill of about 20-25 gallons. This was reported to Mr. E. Liu of the New Jersey D.E.P.

The oil was contained in our concrete dike area except for a few drops which the wind blew onto the grass outside the wall. The oil on the grass was wiped up with absorbent pads and the oil in the dike area was pumped into another tank.

We have contracted to have tank gauges installed to help prevent future spills.

Sincerely,

Ralph E. Stone/TM
Technical Manager

Facility Registration #6408A

Ref. 4
38969

SPILL INCIDENT Date 8/20/85

Bob Rittner called me at home at approximately 8:30 PM on above date and reported the following:

Camden City Fire Department had been called to a spill at 29th and Federal, Camden, yard of Penn Jersey Auto, at a location where we store 2 empty trailers. Valve had been opened by vandals and oil (perhaps 10 gallons) has been spilled onto ground (asphalt) and a small amcunt (perhaps 2 gallons) had spilled onto neighbors land adjoining. Local resident had called out fire service who called out Bob Rittner. Rittner had J. Leech cleaned up all free oil, none of which entered city sewer system.

On the morning of 8/21/85, the contaminated dirt on the resident's land was drummed (approximately ½ drum) and the dirt will be replaced at the earliest opportunity.

A few months ago, a resident of a property adjoining the Penn-Jersey facility approached the Camden City Fire Service with concern over the tank-trailers parked at the Penn Jersey facility. At that time, we visually inspected the trailers and drained the residual oil contained in the tanks. The fire marshall declared himself satisfied that no potential for oil spillage existed. In the intervening period a person or persons unknown has placed approximately 500 gallons on one of the trailers without our knowledge or authority, and it was the oil which created the spill incident.

We have now removed the two tank trailers from the Penn Jersey facility and parked them at our main Camden recycling facility.

Attachment D

Flowen Oil Delaware Valley Inc

1800 Carman Street Camden, N.J. 08105 • Telephone (609) 365-5544

Ref. 4
365 69

July 26, 1984

RECEIVED

JUL 30 1984

N.J. STATE DEPT. OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY

NJ DEP
Southern Regional Office
100 Larwin Road
Cherry Hill, NJ 08034

Attention: Mr. David Bute

Report of Spill

At approximately 6:00 AM on July 25, 1984, a spill of Flowen Oil (recycled used oil) occured at the corner of Haddon Avenue and Market St. in the City of Camden, NJ.

The driver of the vehicle Richard Murphy, immediately notified our Camden facility and a vehicle was dispatched to pick up as much oil as possible. Camden City Police Officer D. Darwerk Badge # 515 attended and called on the Camden County Highway Department to clean up the oil spilled on the highway, an amount of approximately 5 gallons. They attended the scene and sanded the oil, none of which entered the City sewer system.

The vehicle in question a Ford tractor license plate # XE85JP and the 7000 gallon trailer were returned to our facility at Carman Street and all remaining oil was cleaned off before the vehicle resumed its schedule.

The reason for the spill was that a 3" cap on the top of the trailer had been left off and on turning from Haddon Ave. to Market St. some oil had come out of the opening pipe.

David Bute the Duty Officer at DEP Southern Field Office telephone number 609-859-2958 was contacted and the spill reported.

Environmental Protection Agency Region II Office New York City, John LaPadula telephone number 212-548-8730 was contacted and given the requested information on the spill.

Our own employees then sweep up and collected the contaminated sand and returned it here to our Camden location where it is presently in drums. It will be disposed of through our normal solid waste contractor, Delaware Container Co. Inc. (West 11th Ave. and Valley Road, Coatsville, PA. telephone number 215-383-6600, contact person - Mike Canale) under a New Jersey Hazardous Waste Manifest.

In conclusion the spill was dealt with in a satisfactory manner with no residue remaining and the resultant contaminated material will be disposed of through the correct channels. No danger exists to water ways since none of the oil was spilled near a city sewer, and no rain fell during the incident, or the subsequent cleanup operation.

Sincerely yours,

Archie Bilsland
General Manager

AB/sw

SF 00194

Ref. 4
38869

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
120 Rt. 156, Yardville, N.J. 08620

DR. MARWAN M. SADAT, P.E.
DIRECTOR

LINO F. PEREIRA
DEPUTY DIRECTOR

MAY 14 1984

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

AMENDED NOTICE OF VIOLATION
AND OFFER OF SETTLEMENT

DWM Case #83-12-15-04S

Flowen Oil Delaware Valley Corp.
William T. Cahill Jr., Registered Agent
25 Chestnut Street
Haddonfield, New Jersey 08104

Dear Mr. Cahill:

On or before December 15, 1983, as a result of negligence, on the part of Flowen Oil, a hazardous substance (waste oil) was discharged, at the Flowen Oil facility, located at 1800 Carmen Avenue, Lot 1, Block 1431, in the City of Camden, Camden County, onto the ground from which it might flow or drain into the waters of the State of New Jersey.

The incident summarized above was investigated by members of the Division of Waste Management, who determined that the following provisions of the Spill Compensation and Control Act and regulations promulgated thereunder were violated:

N.J.S.A. 58:10-23.11c	Discharging Hazardous Substances
N.J.S.A. 58:10-23.11e	Failure to Immediately Notify the Department of the Discharge [See N.J.A.C. 7:1E-2.1(a)]

The above cited violations carry maximum statutory civil penalties of $25,000 per day for each violation.

Ref. 4
59804

In accordance with the recommendations of the Department of Environmental Protection, and pursuant to the authority vested in me as Administrator of the New Jersey Spill Compensation and Control Fund by N.J.S.A. 58:10-23.11q, I am amenable to compromise and settle these claims for penalties for the sum of $600.00.

Should you decide to settle this matter, payment must be made within fifteen (15) days of your receipt of this letter. Payment must be sent to the Administrator, New Jersey Spill Compensation Fund, Department of Treasury, One West State Street, CN 620, Trenton, New Jersey 08625. Only checks or money orders drawn to the order of "New Jersey Spill Compensation and Control Fund" will be accepted. Your cancelled check or money order will serve as your receipt.

Should you decide not to accept this settlement offer or fail to forward payment within fifteen (15) days of receipt of this letter, this offer is rescinded, and this matter will be referred to the Office of the Attorney General with instructions to initiate a legal action for the maximum allowable penalty.

Acceptance of this settlement offer will satisfy your liability for civil penalties in connection with the above cited violations but will not relieve you of any other responsibility or obligation under the law, including the responsibility to pay for any damages which may have been caused by the discharge.

If you wish to make any inquiries or discuss this settlement offer, you may contact Rai Belonzi, Bureau of Compliance and Enforcement, Division of Waste Management, at 120 Route 156, Yardville, New Jersey 08620 or at (609) 984-3695.

Very truly yours,

Administrator,
New Jersey Spill Compensation and Control Fund

Recommendation Approved By:

Joseph A. Rogalski
Assistant Director
Division of Waste Management
N.J.D.E.P.

F01:F013:lmc

HW 00258

Ref. 4
80864

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
120 Rt. 166, Yardville, N.J. 08620

DR. MARWAN M. SADAT, P.E.
DIRECTOR

LINO F. PEREIRA
DEPUTY DIRECTOR

FEB 23 1984

Flowen Oil Delaware Valley Corp.
William T. Cahill Jr., Registered Agent
25 Chestnut Street
Haddonfield, New Jersey 08104

Re: Notice of Violation

Dear Mr. Cahill:

Pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1, et. seq. and regulations promulgated thereunder, specifically N.J.A.C. 7:26-9.2(a)2 and 12.3(e)2, the following violations were observed:

> During the course of routine facility inspections performed on December 9, 1983 and December 15, 1983, at the Flowen Oil Facility, #NJD980536577, it was noted that the facility violated N.J.A.C. 7:26-9.2(a)2, specifically, handling a hazardous waste in a manner which causes or may cause an unauthorized discharge of pollutants. Also noted, was a violation of N.J.A.C. 7:26-12.3(e)2, the facility failed to comply with all conditions and requirements of its Engineering Design, specifically the facility is using a transfer line that is not included in its Engineering Design.

These violations have been recorded as part of the permanent enforcement history of your facility.

Within 15 days of receipt of this Notice of Violation, you shall submit in writing, to the Bureau of Compliance and Enforcement, Attention of Rai Belonzi, at the above address, the correct measures you have taken to attain compliance.

Ref. 4
4/8/69

The Department of Environmental Protection has chosen not to prosecute the violations noted on the above date but does not relinquish its right to do so in the future.

This letter will serve to advise you that any further violations of N.J.A.C. 7:26-1 et. seq. are subject to a maximum penalty of $25,000 per day in accordance with N.J.S.A. 13:1E-9.

Should you have any questions regarding this matter, contact Rai Belonzi at (609) 984-3695.

Very truly yours,

David J. Shotwell
Chief, Bureau of Compliance
and Enforcement

F010:F013:lmc

Ref. 4
428 69
Diff FYI → File HW/SF
04C8B

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
32 E. Hanover St., CN 027, Trenton, N.J. 08625

JACK STANTON
DIRECTOR

LINO F. PEREIRA
DEPUTY DIRECTOR

19 APR 1983

Mr. James Caccese
Production Manager
Flowen Oil Delaware Valley, Inc.
1800 Carman Street
Camden, New Jersey 08105

RE: Discharge of oil into the Camden storm drain system

Dear Mr. Caccese:

Regarding your letter of April 11, 1983 in which you reported that due to the failure of one of your oil-water separators, oil was discharged into the city storm drain system, the following additional information is requested:

1. Identify specifically which one of your five oil interceptor tanks was involved in this incident.

2. Describe the corrective steps taken to alleviate the problem that was noted on March 30, 1983; and detail the measures taken to assure that this problem does not recur in the future.

If you should have any questions, please contact Mr. Benjamin Esterman of my staff at (609) 984-4061.

Very truly yours,

Frank Coolick

Frank Coolick, Chief
Bureau of Hazardous Waste Engineering

FC:BE:jb

c W. Lowry w/attachment

Camden

Ref. 4
43869

Flowen Oil Delaware Valley Inc

1800 Carman Street, Camden, N.J. 08105 • Telephone (609) 365-5544

January 19, 1983

Division of Waste Management
Department of Environmental Protection
32 E. Hanover Street
CN 027
Trenton, New Jersey 08625

Re: Report of incident at
Flowen Oil Delaware Valley, Inc.
December 17, 1982

Attention: David E. Bute

At 5:40 AM on December 27, 1982 our Process Operator Robert Rittner arrived for work. On going around the site he heard splashing in the finished product area. He immediately investigated and found that tank sampling valves on all four finished product tanks had been opened, and oil was being discharged into the tank containment area. On checking the raw material tanks the same situation was found.

He immediately called the writer and informed him of the situation. He then set about closing all the open valves. As mentioned previously, all four finished product tanks had been opened and the valves on the raw material tanks numbers 1 thru 9 had also been opened.

All the spilled oil had been discharged into the tank containment areas, with none escaping to the surrounding land or Flowen site.

At 6:50 AM the writer arrived on site and personally set about organizing the return of raw material to the storage tanks. This job was completed at approximately 1 PM and we returned 41,000 gallons of product to storage.

At approximately 7:30 AM the writer interviewed the guard on duty from K-9 Guard Service, 1102 Fairview St., Camden, N.J. 08104 who claimed to have heard nothing during his term of duty from 8 PM Sunday, December 26th to the time of the interview.

Ref. 4
4 of 9

At approximately 8 AM the Camden City Police Department were informed of the incident and at approximately 8:30 AM Patrolman A. George from the department arrived to make a preliminary report.

At 7:30 AM the collection drivers arrived to start their days work and it was then discovered that all four collection vehicles had been tampered with. In three out of four cases, ignition keys had been removed, and in all four cases parts of the brake airline system around the rear axles had been removed, thereby immobilizing the vehicles.

At approximately 9 AM Ms. Susan Savoca at the Department of Environmental Protection in Trenton was informed of the incident. She stated that she would have an inspector call to make a report. At approximately 10 AM David E. Bute from DEP arrived on site, investigating an oil discharge into the Cooper River. After contacting his office he also agreed to investigate and report on the spill as here reported.

At approximately 1 PM we started moving products from the finished product containment area and moved it to raw material storage for reprocessing. We removed approximately 15,000 gallons from the finished product area. This job was completed at approximately 4 PM.

We restarted production at approximately 5 PM.

The net result to Flowen Oil of the incident was that a delay of approximately two days occured. One day was spent replacing spilled oil into tanks, and the second day was spent reprocessing the oil spilled into the finished product area.

In addition to this, approximately 11 trucking days were lost due to the time required to repair the trucks, and the delay in obtaining certain spare parts. Also 12 man days were lost due to the work required in cleaning up after the oil had been returned to storage tanks, and the lack of truck availability.

Certain steps have been taken in order to make the Flowen Oil site more secure during the hours of darkness. Firstly a guard dog was introduced between the hours of 10 PM and 8 AM, tethered on a long leash. This dog should give the guard also on duty a warning that when strangers are on or around the site. Additionally, other security measures are being investigated which will give an electronic and/or audible warning when entry is made or attempted to the site.

This incident although most disruptive to Flowen Oil caused no hazard or nuisance to Flowen Oil's neighbors. All the spilled oil was contained within the tank containment areas, and no nuisance or danger was caused through fumes or smell in the atmosphere.

Sincerely yours,

Archie Bilsland
Manager

AB/tm

Ref. 4
46964

Flowen Oil Delaware Valley Inc

1800 Carman Street, Camden, N.J. 08105 • Telephone (609) 365-5544

04 35

June 7, 1982

New Jersey Department of
Environmental Protection
Solid Waste Administration
32 E. Hanover Street
Trenton, New Jersey 08625

Gentlemen:

At approximately 6:00 P.M. on June 1, 1982 while transfering oil into a tank at our tank farm, a tank was overfilled resulting in a small oil spill of about 25 gallons. The incident was reported to Mr. Kirchof of your office at 6:45 P.M.

The oil was contained in our concrete dike area except for about 5 gallon which splattered onto the ground outside the dike area. Absorbent material was spread on the ground area and subsequently disposed of in a dry waste container.

Our contractor will start to install gauges on our tanks this week. The gauges will help to prevent future spills.

Sincerely,

Ralph E. Stone/TM

Ralph E. Stone/TM
Technical Manager

Facility Registration #6408A

Ref. 4
4786

THE CAMDEN COUNTY MUNICIPAL UTILITIES AUTHORITY

FERRY STATION BLDG — SUITE 409 1800 EAST DAVIS STREET CAMDEN, NEW JERSEY
P.O. BOX #1432 CAMDEN, NEW JERSEY 08101 (609) 962-8700

March 5, 1981

Mr. Joseph Forte
Flowen Oils, Delaware Valley Inc.
Cherry Hill Inn - Suite 262
Cherry Hill, New Jersey

Dear Mr. Forte:

This letter will acknowledge that your engineer, Fisher and Sampson, contacted the Camden County Municipal Utilities Authority through its Chief Engineer, Mr. John G. Stroka. Mr. Fisher requested approval of the CCMUA for water waste discharge into the CCMUA system.

On the basis of data submitted, Mr. Stroka advised Mr. Fisher that he would recommend favorable action to the CCMUA..

This letter is to confirm that the Executive Staff will so recommend, based upon data verbally submitted to Mr. Stroka, the approval sought from the Commission.

Please submit your formal application as soon as the New Jersey Department of Environmental Protection has officially set your public hearing date.

Very truly yours,

Herman B. Engelbert
Executive Director

cc: Alfred Pierce, Esq.
John G. Stroka, P.E.

mm

AV FYI / Flowen to be visited weekly as major facility

4-25
Ref 4
43869

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
32 E. Hanover St., CN 027, Trenton, N.J. 08625

JACK STANTON
DIRECTOR

LINO F. PEREIRA
DEPUTY DIRECTOR

Honorable Walter Rand
Senator, 5th District
514 Cooper Street
Camden, New Jersey 08102

Dear Senator Rand:

As the Director of the newly established Division of Waste Managment, your letter of June 24, 1982 to Robert E. Hughey, Commissioner of the Department of Environmental Protection, has been referred to me.

In response to your letter, the Department of Environmental Protection finds that the Hazardous Waste Facility Siting Act, Senate Bill S-1300, applies to Flowen Oil in the following manner.

Flowen is to be considered an existing major hazardous waste facility. Existing facility status, as defined in S-1300, has been granted to Flowen because the company had obtained their permit to operate prior to the effective date of S-1300, which was September 10, 1981. Flowen obtained their permit to operate on June 15, 1981. A major facility classification has been made based upon the approved engineering designs, which reflect that Flowen has the capacity to store 255,000 gallons of hazardous waste in its tanks at any one time. The Department considers a facility major if the onsite hazardous waste storage capacity is greater than 250,000 gallons. Please be advised that the 255,000 gallon figure does not include the two oil/water separators. The exact amount of storage available in these tanks cannot be determined at this time.

As an existing major hazardous waste facility, Flowen is not subject to siting as outlined in S-1300. There are, however, other sections which apply to an existing facility. The following applies to, but need not be limited to, an existing major hazardous waste facility:

1. All construction shall be in compliance with the "State Uniform Construction Code Act", PL 1975, C-127 (C. 52:27D-119 et seq.).

2. Owner or operator must provide evidence of financial responsibility and establish a closure fund mechanism.

3. "All major hazardous waste facilities shall, for the purposes of local property taxation, be assessed and taxed in the same manner as other real property".

4. Subject to a tax equal to 5% of the gross receipts from the hazardous waste operations to be submitted to the municipality in which the facility is located.

5. Subject to periodic inspections to be conducted by local, county, and/or state officials.

Please be advised that an existing major hazardous waste facility is subject to the Hazardous Waste Regulations (N.J.A.C. 7:26-7.1 et seq.).

If you have any questions regarding this matter, please contact Mr. Frank Coolick, Chief, Bureau of Engineering Review and Permits (hazardous waste) at (609) 292-6891.

Sincerely yours,

Jack Stanton
Director
Division of Waste Management

JS:jb

cc Joseph Forte, President
Flowen Oil Company
1800 Carmen Street
Camden, New Jersey 08105

Lino F. Pereira
Edward J. Londres
Frank Coolick

Ref. 4
50 of 69

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278-0012

Note to the file

Subject: Camden Municipal Wells, NJD980769087, and Puchack Wellfield, NJD981084767 as Alias Sites

Date: August 12, 1993

This memorandum is to document that both Camden Municipal Wells and Puchack Wellfield are to be made aliases of the sites listed below. The rationale is that both the Camden and Puchack sites are not sources of contamination, but rather they are targets most likely affected by the sites listed below. These seven sites were listed as potentially responsible parties in the 12/31/89 Site Inspection for Camden Municipal Wells. The Puchack Wellfield is located within the area identified as the Camden Municipal Well site. It is expected that, in addressing the sites listed below, the area-wide groundwater contamination problems represented by the Camden and Puchack sites will be addressed.

The Preliminary Assessments (PA) and Site Inspections (SI) conducted at the Camden and Puchack sites were conducted prior to 1989. Therefore, while these events will become part of the event history at each of the seven sites listed below, they will not be counted as additional accomplishments.

Sites to which Camden Municipal Wells and Puchack Wellfield will become alias:

SGL Modern Hard Chrome Service, NJD002356475.

Swope Oil & Chemical Co., NJD041743220.

Aluminum Shapes Inc., NJD002338267.

Conrail Pavonia Engine Yard, NJD980769095.

Flowen Oil Delaware Valley Corporation, NJD980536577.

Classic Chemical, NJD070280904.

Harrison Avenue Landfill, NJD980527956.

Mary Latka 8/12/93

MEMO NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Ref. 4
5866

TO Ronald T. Corcory

FROM Steve Carfora SC DATE 10/3/83

SUBJECT Flowen Oil and William Uhl

On Monday, 8/29/83 and Thursday, 9/1/83, I had telephone conversations with Al Pierce, a lawyer and regional representative, who is employed by Flowen Oil of Camden, NJ (609-966-4633 or 609-962-7100). Pierce obtained my name and phone number through John Purvis who used to work for the NJDEP and is now employed by the Camden County Solid Waste Department. The information Pierce gave me is summarized below. It may be of interest to BFO's Southern Field Office and possibly to the Division of Criminal Justice (DCJ).

When Pierce called on 8/29/83, he was quite agitated about the fact that Flowen had recently hired someone named William Uhl to be plant manager. He felt that Uhl had a bad reputation and was worried about the possibility that the NJDEP might try to revoke Flowen's hazardous waste transporter license and/or facility permit because someone with Uhl's background and reputation was now associated with Flowen.

Pierce said that Uhl was previously, and possibly still is, in the waste oil transporting business in New York and Pennsylvania. At least one company Uhl is connected with is Central Waste Oil of Rochester, NY. Pierce also mentioned a Pottstown, PA location.

Pierce said that Uhl approached and negotiated with Flowen's majority stockholders who are based in Texas and who are responsible for operating the Camden plant and arrived at an agreement which included the following, and possibly other, conditions:

1. Uhl was named general manager of Flowen's Camden facility and was given authority over the day to day operation of both the facility and the waste transportation end of the business.

2. Uhl leased 10 of his Central Waste Oil waste oil transporting vehicles to Flowen and these vehicles were in turn licensed with the NJDEP to haul waste oil under Flowen's name. According to Pierce, one condition of this leasing arrangement was that Uhl be named general manager.

Pierce was very concerned about the above agreement because:

1. Even though Uhl's background and experience is as a waste hauler and not as a facility operator, Uhl insisted on being given the authority to run the facility.

2. He was concerned that Uhl may pick up some "bad" loads of waste oil and bring them to Flowen.

On 9/1/83, Pierce called me back and informed me that he gave Uhl a 30 day termination notice the day before (Wednesday, 8/31/83). He was able to do this, he said, because he convinced the Texas stockholder group that if

Flowen wants to maintain a good image it should not employ someone with Uhl's questionable background. Pierce said that Flowen will no longer lease Uhl's vehicles but will attempt to purchase them outright. He also said that, in connection with this matter, Joseph C. Norman, a representative from the Texas stockholder group, was coming to the Camden facility on September 12.

On Monday, 9/26/83, I contacted Leonard Tritt of the Pennsylvania Department of Environmental Resources (PADER). He gave me the following information about Uhl which he personally knew about or which he obtained from Frank Murphy of the New York Department of Environmental Conservation (NYDEC).

Central Waste Oil, Inc. (CWO) is owned by Uhl. It is headquartered in Rochester, NY and has a terminal in Pottstown, PA. Uhl has a number of suspected or confirmed connections with other waste oil firms, namely:

1. Smith & Lockwood Oil (Uhl's sister-in-law, Lois Smith, is a business partner with Hoot Lockwood in this company)
2. Berks Associates (of Pennsylvania)
3. Booth Oil (NY)
4. Monoco Oil (NY)
5. Calleia Brothers (NY)

Tritt said that the NYDEC considers CWO "somewhat shaky" and CWO is the subject of some suspicions and/or investigations in PA and NY.

Comments

My major concern about this matter is that someone might have been behind Uhl's efforts to get a position of responsibility with Flowen, or may have even coerced Uhl to do what he did. This is where DCJ may come in.

DM-012

OIFF FYI → file

Ref. 4

53869

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Ron Corcory, Chief, BFO

FROM Frank Coolick, Chief, BWHE DATE June 8, 1983

SUBJECT Flowen Oil Delaware Valley, Inc. Camden, N.J., Draining, cleaning, and inspection schedule for oil interceptor units

The BHWE was notified by Flowen Oil Delaware Valley, Inc. that on March 30, 1983, they experienced a failure of one of five (designated #1) of their oil-water separators which caused oil to discharge into the City storm drain system. The cause of the failure was attributed to clogging of the water discharge pipe from this interceptor by accumulated sludge which allowed the water to back up causing the oil to discharge into the water stream through an overflow line in the City sewer system.

A visit was made to the site on April 21, 1983 by Mr. E. Kuhlwein, B. Esterman and W. Lowry at which time the matter was discussed with Mr. James Turpin, General Manager of Flowen Oil. He explained the circumstances of the incident and the corrective action taken. Mr. Turpin also stated during the visit that to prevent future recurrences, the #1 interceptor would be tied into series with the #2 unit thus providing a mechanism so that if the #1 unit malfunctioned, the overlfow would not go directly into the City sewer system.

As requested, Flowen Oil submitted a letter (copy enclosed) further detailing the corrective steps taken by them following the oil discharge incident and outlining measures taken to prevent recurrences of this type incident. The preventative measures proposed include more frequent scheduled draining, cleanout, and inspection of the oil interceptors to insure proper functioning of these units. The tie-in of the #1 unit in series with #2 is being delayed to an unspecified future date.

This information is being brought to your attention with the recommendation that future inspection trips to Flowen Oil include examination of their operating logs to ascertain whether the oil-water separators are actually being serviced according to their proposed schedule in order to prevent possible spillage of oil into the Camden storm drain system; especially since the connection of the #1 unit to the #2 unit is not presently being implemented.

FC
F.C.

Charlie - Pl insure that we check this during our next inspection
Ron

FC:BE:jb

Enclosure

c: W. Lowry

Ref. 4
5/8/69

CITY OF CAMDEN

CONSTRUCTION ENFORCING AGENCY -- DEPARTMENT OF COMMUNITY DEVELOPMENT

Room 101 - City Hall - Camden, N. J., 08101
405 (609) 757 - ~~7075~~ 7031

INTER-OFFICE RETURN REFERRAL MEMORANDUM

APPLICATION NO: 81-30

DATE RECEIVED: 7-24-81

SCOPE OF REVIEW

[x] Construction Permit
[ ] Certificate of Occupancy
[ ] Zoning
[x] Other Fee

SUBCODE OFFICIAL

[ ] Building
[ ] Electrical
[ ] Fire
[x] Plumbing

RESULTS OF REVIEW

[x] Approved
[ ] Rejected: For the reasons stated below

(REASONS FOR REJECTION)

$154.00	Sewer Conn.	100.00
	Plan	5.00
	Permit	10.00
	Fixtures	39.00
		154.00

DATE RETURNED: _____

SUBCODE OFFICIAL: _____ (Building, Plumbing, etc.)

SIGNATURE: [signature]

Ref. 4
5869

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kim - File

TO Keith Onsdorff, Assistant Director

FROM Susan Savoca DATE 1/5/83

SUBJECT Flowen Oil Delaware Valley

On the morning of Monday, December 27, 1982 (at about 10:00 a.m.), "Al Pierce" of Flowen Oil (Camden County) called John Purves. In John's absence, I took the call. Mr. Pierce informed me that during the night of December 26, 1982 the facility had been broken into and property had been damaged; i.e. hoses were severed, sugar was put in vehicle gas tanks, valves had been opened. This occurred in spite of the presence of a 24 hour security guard. Mr. Pierce opined that it was a "professional job." Upon my inquiry, Mr. Pierce told me that the spillage had been contained in the facility's reservior and that it was now being cleaned up. According to Mr. Pierce, the police were informed of the occurrence. Mr. Pierce solicited DEP's assistance in finding the perpetrator but I informed him that this agency does not undertake police investigations.

I immediately transmitted the above information to Charles Krauss (DWM, Southern Field Office) and Dave Longstreet (DWM, Northern Field Office). (Note that Mr. Longstreet was contacted because Quanta's oil is being taken to Flowen). I requested Charles Krauss to send an inspector to investigate the matter (which he did).

At about 11:15 a.m. on December 27, 1982, Charlie Krauss telephoned me to advise me that an oil spill in the Cooper River over the weekend is being traced by the Coast Guard through the sewer system. The source appears to be the Flowen facility.

I advised Jerry Bruke of these events (in the absence of Keith Onsdorff and Mike Marotta) and telephoned the information to Joe Rogalski.

I then called Trenton Dispatch (2-7172).. Franklin Nicoloudakis said he received a phone call on December 22, 1982 about an oil spill in Camden along the Admiral Wilson Blvd. near the bridge by the Merritt station. Spill was on the shore and in the Cooper River. John Bailey 541-9683, citizen, phoned the complaint and opined that it was No. 6 oil. No call was received by Trenton Dispatch regarding a spill at Flowen.

Ref. 4
56969

I then contacted Barbara Greer, who indicated she w
inform the Division of Criminal Justice about these even

About 12:30 p.m. on December 27, 1982, I called Flo
and spoke to Al Pierce. Mr. Pierce indicated that the f
would be able to accept the Quanta oil today. DEP inspe
Dave Bute was at the facility and informed me that the d
was "considerable" but that as far as he could tell no w
had escaped the containment area.

On December 28, 1982, I spoke to Bif Lowry who advi
me that he will follow-up on this matter.

Susan Savoca

SS/sje

cc: Director Catania
Jerry Burke
Mike Marotta
Barbara Greer
Joseph Rogalski
[redacted]
John Purves
Dave Longstreet
Flowen File
Quanta File

02-9011-20 Ref. 4

DRAFT

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Site Name: Flowen Oil 58964
Date: Delaware Valley Corp.

NOV 06 1990

PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	*WC = 32*	*WC = 100*	Formula for Assigning Source WQ Values
CONSTITUENT	N/A	≤100 lbs	>100 to 10,000 lbs	>10,000 lbs	*lbs ÷ 1*
WASTESTREAM	N/A	≤500,000 lbs	>500,000 to 50 million lbs	>50 million lbs	*lbs ÷ 5,000*
VOLUME	Landfill	≤6.75 million ft³ ≤250,000 yd³	>6.75 million ft³ to 675 million ft³ >250,000 to 25 million yd³	>675 million ft³ >25 million yd³	*ft³ ÷ 67,500* *yd³ ÷ 2,500*
	Surface impoundment	≤6,750 ft³ ≤250 yd³	>6,750 ft³ to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	*ft³ ÷ 67.5* *yd³ ÷ 2.5*
	Drums	≤1,000 drums	>1,000 to 100,000 drums	>100,000 drums	*drums ÷ 10*
	Tanks and non-drum containers	≤50,000 gallons	>50,000 to 5 million gallons	>5 million gallons	*gallons ÷ 500*
	Contaminated soil	≤6.75 million ft³ ≤250,000 yd³	>6.75 million ft³ to 675 million ft³ >250,000 to 25 million yd³	>675 million ft³ >25 million yd³	*ft³ ÷ 67,500* *yd³ ÷ 2,500*
	Pile	≤6,750 ft³ ≤250 yd³	>6,750 ft³ to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	*ft³ ÷ 67.5* *yd³ ÷ 2.5*
AREA	Landfill	≤340,000 ft² ≤7.8 acres	>340,000 to 34 million ft² >7.8 to 780 acres	>34 million ft² >780 acres	*ft² ÷ 3,400* *acres ÷ 0.078*
	Surface impoundment	≤1,300 ft² ≤0.029 acres	>1,300 to 130,000 ft² >0.029 to 2.9 acres	>130,000 ft² >2.9 acres	*ft² ÷ 13* *acres ÷ 0.00029*
	Contaminated soil	≤3.4 million ft² ≤78 acres	>3.4 million to 340 million ft² >78 to 7,800 acres	>340 million ft² >7,800 acres	*ft² ÷ 34,000* *acres ÷ 0.78*
	Pile*	≤1,300 ft² ≤0.029 acres	>1,300 to 130,000 ft² >0.029 to 2.9 acres	>130,000 ft² >2.9 acres	*ft² ÷ 13* *acres ÷ 0.00029*
	Land treatment	≤27,000 ft² ≤0.62 acres	>27,000 to 2.7 million ft² >0.62 to 62 acres	>2.7 million ft² >62 acres	*ft² ÷ 270* *acres ÷ 0.0062*

1 ton = 2,000 lbs = 1 yd³ = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WQ Total	*WC Score*
>0 to 100	18
>100 to 10,000	32
>10,000	100

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NOV 0 6 1990

02-9011-20

Site Name: Flowen Oil

Date: Delaware Valley Corp.

Ref. 4

53864

GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics		
Do you suspect a release (see Ground Water Pathway Criteria List, page 71?	Yes ✓	No
Is the site located in karst terrain?	Yes	No ✓
Depth to aquifer:		30
Distance to the nearest drinking-water well:		

LIKELIHOOD OF RELEASE	A Suspected Release	B No Suspected Release	References
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 71), assign a score of 550, and use only column A for this pathway.	550		
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.			
LR =	550		

TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you suspect have been exposed to hazardous substances from the site (see Ground Water Pathway Criteria List, page 71). _____ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you do NOT suspect have been exposed to hazardous substances from the site, and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes ✓ No ___ If yes, attach a page to show apportionment calculations.	1735		
5. NEAREST WELL: If you have identified any Primary Targets for ground water, assign a score of 50; otherwise, assign the highest Nearest Well score from PA Table 2. If no drinking-water wells exist within 4 miles, assign a score of zero.	9		3,4,12-17
6. WELLHEAD PROTECTION AREA (WHPA): Assign a score of 20 if any portion of a designated WHPA is within ¼ mile of the site; assign 5 if from ¼ to 4 miles.	0		
7. RESOURCES: A score of 5 is assigned.	5	5	
T =	1749		

WASTE CHARACTERISTICS		
8. A. If you have identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.		
B. If you have NOT identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4.	32	
WC =	32	

GROUND WATER PATHWAY SCORE: $\frac{LR \times T \times WC}{82.500}$ = 100

Site Name: Flowen Oil
Date: Delaware Valley Corp.

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PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	Population Value
0 to ¼ mile	0	20	1	2	5	16	52	163	521	1,633	5,214	16,325	0
> ¼ to ½ mile	0	18	1	1	3	10	32	101	323	1,012	3,233	10,121	0
> ½ to 1 mile	7941	(9)	1	1	2	6	17	52	(167)	522	1,668	5,224	167
> 1 to 2 miles	35,474	5	1	1	1	3	9	29	94	294	(939)	2,938	939
> 2 to 3 miles	13,714	3	1	1	1	2	7	21	68	(212)	678	2,122	212
> 3 to 4 miles	60,518	2	1	1	1	1	4	13	42	131	(417)	1,306	417
Nearest Well =		9										Score =	1735

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	Population Value
0 to ¼ mile		20	1	2	5	16	52	163	521	1,633	5,214	16,325	
> ¼ to ½ mile		20	1	1	3	10	32	101	323	1,012	3,233	10,121	
> ½ to 1 mile		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 1 to 2 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 2 to 3 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 3 to 4 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
Nearest Well =												Score =	

Ref. 4
Page 69

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NOV 06 1990

02-9011-20

Site Name: Flowen Oil

Date: Delaware Valley Corp.

Ref. 4
60 & 69

SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Surface Water Pathway Criteria List, page 111?	Yes ✓ No ___
Distance to surface water:	11,880 ft
Flood Frequency:	500 yrs
What is the downstream distance to the nearest drinking-water intake?	NA miles
nearest fishery? ___ miles nearest sensitive environment? ___ miles	

LIKELIHOOD OF RELEASE

	A Suspected Release	B No Suspected Release	References
1. SUSPECTED RELEASE: If you suspect a release to surface water (see page 11), assign a score of 550, and use only column A for this pathway.	550		
2. NO SUSPECTED RELEASE: If you do not suspect a release to surface water, and the distance to surface water is 2,500 feet or less, assign a score of 500; otherwise, assign a score from the table below. Use only column B for this pathway.			
LR =	550		

Floodplain	Score
Site in annual or 10-yr floodplain	500
Site in 100-yr floodplain	400
Site in 500-yr floodplain	300
Site outside 500-yr floodplain	100

DRINKING WATER THREAT TARGETS

3. Determine the water body types, flows (if applicable), and number of people served by all drinking-water intakes within the 15-mile target distance limit. If there are no drinking-water intakes within the target distance limit, assign a total Targets score of 5 at the bottom of this page (Resources only) and proceed to page 14.

Intake Name	Water Body Type	Flow	People Served
		___ cfs	
		___ cfs	
		___ cfs	

4. PRIMARY TARGET POPULATION: If you suspect any drinking-water intake listed above has been exposed to hazardous substances from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the number of people served.

___, ___,

___ people x 10 =

5. SECONDARY TARGET POPULATION: Determine the Secondary Target Population score from PA Table 3 based on the populations using drinking-water from intakes that you do NOT suspect have been exposed to hazardous substances from the site.

Are any intakes part of a blended system? Yes ___ No ___

If yes, attach a page to show apportionment calculations.

6. NEAREST INTAKE: If you have identified any Primary Targets for the drinking water threat (Factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking-water intake exists within the 15-mile target distance limit, assign a score of zero.

	0	

7. RESOURCES: A score of 5 is assigned.

	5	5
	5	

Site Name: Flowen Oil
Date: Delaware Valley Co

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PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow Characteristics (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category: 1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	Population Value
< 10 cfs	_____	20	2	6	16	52	163	521	1,633	5,214	16,325	52,136	163,248	_____
10 to 100 cfs	_____	2	1	1	2	6	16	52	163	521	1,633	5,214	16,325	_____
> 100 to 1,000 cfs	_____	1	0	0	1	1	2	5	16	52	163	521	1,633	_____
> 1,000 to 10,000 cfs	_____	0	0	0	0	0	1	1	2	6	16	52	163	_____
> 10,000 cfs or Great Lakes	_____	0	0	0	0	0	0	0	1	1	2	6	16	_____
3-mile Mixing Zone	_____	10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663	_____
Nearest Intake =													Score =	

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body: Water Body Type	OR Flow Characteristics	Dilution Weight
minimal stream	flow less than 10 cfs	1
small to moderate stream	flow 10 to 100 cfs	0.1
moderate to large stream	flow greater than 100 to 1,000 cfs	N/A
large stream to river	flow greater than 1,000 to 10,000 cfs	N/A
large river	flow greater than 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers	flow 10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes	N/A	N/A

Ref. 4
69 of 69

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NOV 0 6 1990

02-9011-20

Ref. 4
62864

Site Name: Flower Oil
Date: Delaware Valley Corp.

SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

LIKELIHOOD OF RELEASE		A Suspected Release	B No Suspected Release	References
Enter the Surface Water Likelihood of Release score from page 12.	LR =	550		

HUMAN FOOD CHAIN THREAT TARGETS

8. Determine the water body types and flows (if applicable) for all fisheries within the 15-mile target distance limit. If there are no fisheries within the target distance limit, assign a Targets score of 0 at the bottom of this page and proceed to page 15.

Fishery Name	Water Body Type	Flow
Delaware River	Tidally Affected River Tidal	cfs
		cfs
		cfs
		cfs
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the Primary Fisheries:

_____, _____

_____, _____

10. SECONDARY FISHERIES: If you have not identified any Primary Fisheries, assign a Secondary Fisheries score from the table below using the LOWEST flow at any fishery within the 15-mile target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

12

T = 12

02-9011-20

Ref. 4
63869

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Site Name: Flowers Oil
Date: Delaware Valley Corp

NOV 06 1990

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

LIKELIHOOD OF RELEASE		A Suspected Release	B No Suspected Release	References
Enter the Surface Water Likelihood of Release score from page 12.	LR =	550		

ENVIRONMENTAL THREAT TARGETS

11. Determine the water body types and flows (if applicable) for all surface water sensitive environments within the 15-mile target distance limit (see PA Tables 4 and 5). If there are no sensitive environments within the 15-mile target distance limit, assign a Targets score of 0 at the bottom of this page, and proceed to page 17.

Environment Name	Water Body Type	Flow
Wetlands		Tidal cfs
		cfs
		cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 13. List the Primary Sensitive Environments:

_____, _____,

_____, _____.

13. SECONDARY SENSITIVE ENVIRONMENTS:

A. For Secondary Sensitive Environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)		Environment Type and Value (PA Tables 5 and 6)		Total
Tidal cfs	NA	x	Wetlands	=	250
cfs		x		=	
cfs		x		=	
cfs		x		=	
cfs		x		=	

Sum = 250

B. If NO Secondary Sensitive Environments are located on surface water bodies with flows of 100 cfs or less, assign a score of 10. 0

T = 250

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02-9011-20

Ref. 4
64 of 69

Site Name: Flowen Oil Delaware Valley Corp
Date:

NOV 06 1990

SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

WASTE CHARACTERISTICS

	A *Suspected Release*	B *No Suspected Release*
14. A. If you have identified ANY Primary Targets for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.		
B. If you have NOT identified any Primary Targets for surface water, assign the waste characteristics score calculated on page 4.	32	
WC =	32	

SURFACE WATER PATHWAY THREAT SCORES

Threat	*Likelihood of Release (LR) Score (from page 12)*	*Targets (T) Score*	*Pathway Waste Characteristics (WC) Score (determined above)*	*Threat Score LR x T x WC / 82,500*
Drinking Water	550	5	32	1.07
Human Food Chain	550	12	32	2.56
Environmental	550	250	32	53.33

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat) 56.96

Ref. 4
65&64

DRAFT

NOV 06 1990

CONFIDENTIAL - NOT FOR PUBLIC RELEASE 02-9011-20

Site Name: Flowen Oil
Date: Delaware Valley Corp

PA TABLE 5: SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES

Sensitive Environment	*Assigned Value*
Critical habitat for Federally designated endangered or threatened species Marine Sanctuary National Park Designated Federal Wilderness Area Ecologically important areas identified under the Coastal Zone Wilderness Act Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes) National Monument National Seashore Recreation Area National Lakeshore Recreation Area	100
Habitat known to be used by Federally designated or proposed endangered or threatened species National Preserve National or State Wildlife Refuge Unit of Coastal Barrier Resources System Federal land designated for the protection of natural ecosystems Administratively Proposed Federal Wilderness Area Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay or estuary Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding National river reach designated as recreational	75
Habitat known to be used by State designated endangered or threatened species Habitat known to be used by a species under review as to its Federal endangered or threatened status Coastal Barrier (partially developed) Federally designated Scenic or Wild River	50
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Area Particular areas, relatively small in size, important to maintenance of unique biotic communities	25
State designated areas for the protection/maintenance of aquatic life under the Clean Water Act	5
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

PA TABLE 6: SURFACE WATER WETLANDS FRONTAGE VALUES

Total Length of Wetlands	*Assigned Value*
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

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02-9011-20

Ref. 4
66 of 69

Site Name: Flower Oil
Date: Delaware Valley Corp

NOV 0 3 1990

SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics		
Do any people live on or within 200 ft of areas of suspected contamination?	Yes ___	No ✓
Do any people attend school or day care on or within 200 ft of areas of suspected contamination?	Yes ___	No ✓
Is the facility active? Yes ✓ No ___ If yes, estimate the number of workers: 10		

	A Suspected Contamination	B No Suspected Contamination	References
LIKELIHOOD OF EXPOSURE			
1. SUSPECTED CONTAMINATION: Surficial contamination is assumed. A score of 550 is assigned. LE =	550		
RESIDENT POPULATION THREAT TARGETS			
2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18). ___ people x 10 =	0		
3. RESIDENT INDIVIDUAL: If you have identified any Resident Population (Factor 2), assign a score of 50; otherwise, assign a score of 0.	0		
4. WORKERS: Assign a score from the following table based on the total number of workers at the facility and nearby facilities with suspected contamination:	5		
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value from PA Table 7 for each terrestrial sensitive environment that is located on an area of suspected contamination: Sum =	0		
6. RESOURCES: A score of 5 is assigned.	5		
T =	10		
WASTE CHARACTERISTICS			
7. Assign the waste characteristics score calculated on page 4. WC =	32		
RESIDENT POPULATION THREAT SCORE: LE x T x WC / 82,500	2.13		
NEARBY POPULATION THREAT SCORE: *Assign a score of 2*	2		
SOIL EXPOSURE PATHWAY SCORE: Resident Population Threat + Nearby Population Threat	4.13		

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
> 1,000	15

Terrestrial Sensitive Environment Type	Value

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02-9011-20

Ref. 4 GW6

Site Name: Flowen Oil
Date: Delaware Valley Corp.

NOV 06 1990

AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 21)?	Yes ___ No /
Distance to the nearest individual:	___ ft

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
1. SUSPECTED RELEASE: If you suspect a release to air (see page 21), assign a score of 550, and use only column A for this pathway.			
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500, and use only column B for this pathway.		500	
LR =		500	
TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a release of hazardous substances through the air (see Air Pathway Criteria List, page 21). ___ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people within the 4-mile target distance limit, and assign the total population score from PA Table 8.		157	
5. NEAREST INDIVIDUAL: If you have identified any Primary Targets for the air pathway, assign a score of 50; otherwise, assign the highest Nearest Individual score from PA Table 8.		20	
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from air hazardous substances (see Air Pathway Criteria List, page 21).			
Sensitive Environment Type / Value: ___ / ___ ; ___ / ___			
Sum =			
7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.		0	
8. RESOURCES: A score of 5 is assigned.	5	5	
T =		182	
WASTE CHARACTERISTICS			
9. A. If you have identified any Primary Targets for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.			
B. If you have NOT identified any Primary Targets for the air pathway, assign the waste characteristics score calculated on page 4.		32	
WC =		32	

AIR PATHWAY SCORE: $\frac{LR \times T \times WC}{82{,}500}$ = 35.30

Site Name: Flowen Oil
Date: Delaware Valley Corp.

PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose highest)	Population Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	Population Value
Onsite	0	20	1	2	6	16	62	163	521	1,633	5,214	16,325	52,136	163,246	0
>0 to ¼ mile	1700	(20)	1	1	1	4	13	(41)	130	408	1,303	4,081	13,034	40,811	41
>¼ to ½ mile	4600	2	0	0	1	1	3	9	(28)	88	282	882	2,815	8,815	28
>½ to 1 mile	23,400	1	0	0	0	1	1	3	8	(26)	83	261	834	2,612	26
>1 to 2 miles	64,800	0	0	0	0	0	1	1	3	8	(27)	83	266	833	27
>2 to 3 miles	91,100	0	0	0	0	0	1	1	1	4	(12)	38	120	376	12
>3 to 4 miles	238,706	0	0	0	0	0	0	1	1	2	7	(23)	73	229	23
Nearest Individual =		20												Score =	157

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

Distance	Distance Weight	Sensitive Environment Type and Value from PA Table 6 or 7	Product
Onsite	0.10	x	
		x	
0-1/4 mi	0.025	x	
		x	
		x	
1/4-1/2mi	0.0054	x	
		x	
		x	
		x	
		Total Environments Score =	

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Ref 4
6 Pg 64

DRAFT NOV 06 1990 CONFIDENTIAL - NOT FOR PUBLIC RELEASE

02-9011-20 Ref 4
69 of 69

Site Name: Flowers Oil
Date: Delaware Valley Corp.

SITE SCORE CALCULATION

	S	S^2
GROUND WATER PATHWAY SCORE (S_{gw}):	100	10.000
SURFACE WATER PATHWAY SCORE (S_{sw}):	56.96	3244.44
SOIL EXPOSURE PATHWAY SCORE (S_{se}):	4.13	17.06
AIR PATHWAY SCORE (S_a):	35.30	1246.09
SITE SCORE: $\sqrt{\frac{S_{gw}^2+S_{sw}^2+S_{se}^2+S_a^2}{4}}$ =		60.22

REFERENCE NO. 5

Ref. 5
1 of 1

EBASCO SERVICES INCORPORATED
One Oxford Valley, Suite 200, Langhorne, PA 19047 (215) 752-0212

PROJECT:		TELECON NOTE
PROJECT NO.	DATE: Oct. 14, 1994	TIME: 10:45
DISTRIBUTION:		
BETWEEN: Christie Webby	OF: Remtech	PHONE: (609) 3655544
AND: Meg Watson, Ebasco		

DISCUSSION: I called Remtech to request information regarding the Flowen Oil Delaware Valley Corp., Camden NJ site. Specifically, to find out if this site is a RCRA licenced facility. Ms. Webber informed me that they are a NJDEP Part B permited TSDF and do not receive RCRA wastes at this time. Their permit no. is #0408B1HP01. For futher information regarding previous RCRA permitting, She referred me to the Remtech Regulatory Compliance Manager, Tom Thompson at (717) 938-4700.

ACTION ITEMS: Will call Tom Thompson, Remtech to find out if the facility was ever authorized under RCRA Part A or Interim Status.

EBASCO

MEMO NEW JERSEY STATE DEPARTMENT OF E IRONMENTAL PROTECTION

Ken - file

TO Keith Onsdorff, Assistant Director

FROM Susan Savoca DATE 1/5/83

SUBJECT Flowen Oil Delaware Valley

On the morning of Monday, December 27, 1982 (at about 10:00 a.m.), "Al Pierce" of Flowen Oil (Camden County) called John Purves. In John's absence, I took the call. Mr. Pierce informed me that during the night of December 26, 1982 the facility had been broken into and property had been damaged; i.e. hoses were severed, sugar was put in vehicle gas tanks, valves had been opened. This occurred in spite of the presence of a 24 hour security guard. Mr. Pierce opined that it was a "professional job." Upon my inquiry, Mr. Pierce told me that the spillage had been contained in the facility's reservior and that it was now being cleaned up. According to Mr. Pierce, the police were informed of the occurrence. Mr. Pierce solicited DEP's assistance in finding the perpetrator but I informed him that this agency does not undertake police investigations.

I immediately transmitted the above information to Charles Krauss (DWM, Southern Field Office) and Dave Longstreet (DWM, Northern Field Office). (Note that Mr. Longstreet was contacted because Quanta's oil is being taken to Flowen). I requested Charles Krauss to send an inspector to investigate the matter (which he did).

At about 11:15 a.m. on December 27, 1982, Charlie Krauss telephoned me to advise me that an oil spill in the Cooper River over the weekend is being traced by the Coast Guard through the sewer system. The source appears to be the Flowen facility.

I advised Jerry Bruke of these events (in the absence of Keith Onsdorff and Mike Marotta) and telephoned the information to Joe Rogalski.

I then called Trenton Dispatch (2-7172).. Franklin Nicoloudakis said he received a phone call on December 22, 1982 about an oil spill in Camden along the Admiral Wilson Blvd. near the bridge by the Merritt station. Spill was on the shore and in the Cooper River. John Bailey 541-9683, citizen, phoned the complaint and opined that it was No. 6 oil. No call was received by Trenton Dispatch regarding a spill at Flowen.